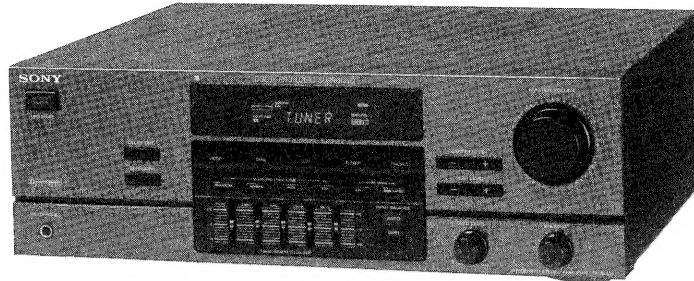


TA-AV431/AV531

SERVICE MANUAL

US Model
Mexican Model
TA-AV431
US Model
TA-AV531



This set is the amplifier section
in SEN-431CD/531CD

This photo is TA-AV531

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8-ohm loads, both channels driven, from 40 – 20,000 Hz; rated 135 (TA-AV531), 110 (TA-AV431) watts per channel minimum RMS power, with less than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Power bandwidth (IHF) 30 Hz – 30 kHz (8 ohms) (TA-AV531)

Dynamic headroom 1.7 dB (*78 IHF) (TA-AV531)

Harmonic distortion Less than 0.9% at rated output (Surround OFF) (TA-AV531)

Frequency response PHONO: RIAA equalization curve
CD, VIDEO, TUNER, TAPE:
10 Hz – 50 kHz \pm 3 dB (TA-AV531)

PHONO: RIAA curve

CD, VIDEO: 10 Hz – 50 kHz \pm 3 dB (TA-AV431)

Rear output 15 W + 15 W (at front off 8 ohms) (TA-AV531)

10 W + 10 W (at front off 8 ohms) (TA-AV431)

Center output 30 W (at front off 4 ohms) (TA-AV531)

Damping factor 27 (8 ohms, 1 kHz) (TA-AV531)

Input (TA-AV531)

Input jack	Jack type	Sensitivity	Impedance	S/N (weighting network, input level)
PHONO	Phono	3.0 mV	50 kilohms	71 dB 75 dB* (A, 3.0 mV)
CD, VIDEO, TAPE	Phono	250 mV	50 kilohms	92 dB 83 dB* (A, 250 mV)

*78 IHF

(TA-AV431)

	Sensitivity	Impedance
PHONO	2.5 mV	50 kilohms
CD, VIDEO	250 mV	50 kilohms

Output (TA-AV531)

TAPE (REC OUT)	Phono jacks	Voltage 150 mV Impedance 1 kilohm
SPEAKERS (Front, Rear)	—	Accepts speakers of 8 – 16 ohms
SPEAKERS (Center)	—	Accepts speakers of 4 – 16 ohms
HEADPHONES	Stereo phone jack	Accepts low and high impedance headphones.

Output (TA-AV431)

SPEAKER: Accepts speakers of 8 to 16 ohms
HEADPHONES: Accepts headphones with low and high impedance

GRAPHIC EQUALIZER controls

Boost/Cut range: \pm 8 dB (100 Hz, 330 Hz, 1 kHz, 3.3 kHz) \pm 6 dB (10 kHz)

Dimensions

Approx. 430 \times 145 \times 360 mm (w/h/d)
(17 \times 5 $\frac{3}{4}$ \times 14 $\frac{1}{4}$ inches)

Weight

(including projecting parts and controls)
Approx. 9.9 kg (21 lb 14 oz): TA-AV531
Approx. 9.5 kg (20 lb 15 oz): TA-AV431

General

Power requirements

120 V AC, 60 Hz
250 W (TA-AV531)
220 W (TA-AV431)

Power consumption

AC outlets

2 switched, 120 W/1 A max. (TA-AV531)

— Continued on next page —



INTEGRATED STEREO AMPLIFIER
SONY®

Accessories supplied

- AM loop antenna (1)
- FM wire antenna (1)
- SYSTEM CONTROL cord (1) (TA-AV531)
- Remote Commander
 - RM-U521 (1) (TA-AV531)
 - RM-U421 (1) (TA-AV431)
- Sony batteries SUM-3 (NS) (2)
- Audio signal connecting cord
 - (phono plug × 2 ↔ phono plug × 2) (1)
- SYSTEM CONTROL 1 cord (1)
- SYSTEM CONTROL 2 cord (1)
- SYSTEM CONTROL 3 cord (1)
- (The SYSTEM CONTROL 1 and 3 is equipped on the TC-W431.) (TA-AV431)

Design and specifications are subject to change without notice.

TABLE OF CONTENTS

Section	Title	Page
SECTION 1.	GENERAL	3
	• TA-AV431	3
	• TA-AV531	4
SECTION 2.	IC PIN FUNCTIONS	5
SECTION 3.	DIAGRAMS	
3-1.	Circuit Boards Location	9
3-2.	Semiconductor Lead Layouts	9
3-3.	Block Diagram	10
3-4.	Printed Wiring Board	
	• MAIN Section	13
3-5.	Schematic Diagram	
	• MAIN Section	17
3-6.	Schematic Diagram	
	• DISPLAY Section	21
3-7.	IC Block Diagrams	23
SECTION 4.	EXPLODED VIEWS	
4-1.	Front Panel Section	25
4-2.	Board Section	26
SECTION 5.	ELECTRICAL PARTS LIST	27

SAFETY CHECK-OUT

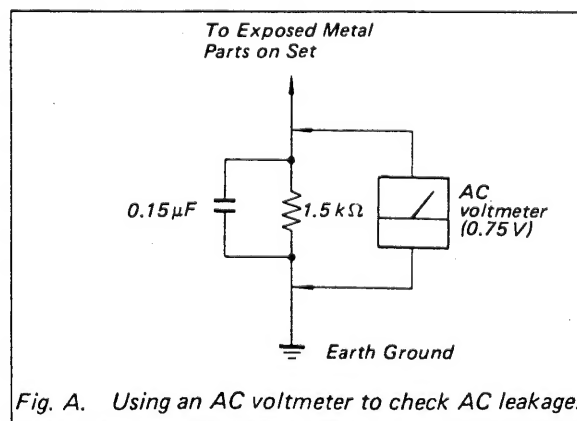
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

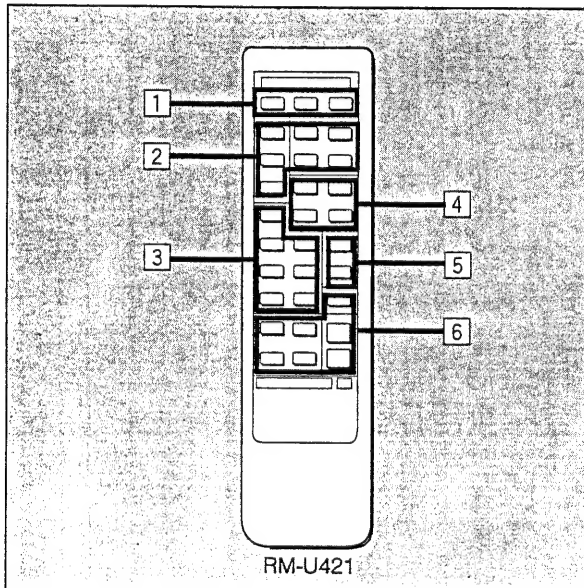
SECTION 1 GENERAL

This section is extracted from instruction manual.

(TA-AV431)

Remote Commander

The remote commander supplied with this unit can control the unit from a distance.
The remote commander is divided into 6 sections according to the functions as shown below.



1 Power control block

VTR 3*/TV/AUDIO POWER buttons: Control the power of each unit.

2 TV/VTR control block

VTR 3* operation buttons:

- ▶: Play
- : Stop

ANT (antenna) TV/VTR button: Selects the output signal from the antenna terminal on the VCR, either a TV signal or VCR programs.

TV VOL (volume) +/- buttons: Control the volume of TV.

TV CH (channel) +/- buttons: Select the channel of the TV.

3 CD control block

SHUFFLE button: Set to the shuffle play mode.

- ▶: Play

In the TUNER mode:

When you press CD ▶ once, the unit enters the CD mode.

When you press CD ▶ twice, the CD player starts playback.

In the mode other than the TUNER mode:

When you press CD ▶ once, the unit enters the CD mode and starts playback.

- : Stop

◀◀/▶▶ (AMS: Automatic Music Search): Locates a desired selection.

D (disc) SKIP button: Disc skip

CONTINUE button: Set to the continuous play mode.

4 SURROUND control block

SURROUND mode selectors (for the amplifier)

ON/OFF: Turns on/off the surround mode.

MODE: Selects the surround mode.

REAR VOL +/- buttons: Control the volume of rear speakers (surround level).

5 Tuner control block

TUNER PRESET +/- buttons: Select a preset station of the tuner.

6 Amplifier control block

FUNCTION selectors: Select an input source of the amplifier. (for the amplifier)

DBFB button: Turns on/off the DBFB (Dynamic Bass Feed Back). (for the amplifier)

MASTER VOL +/- buttons: Control the amplifier volume.

* You can control Sony's VHS video decks with the VTR 3 POWER and VTR 3 operation buttons.

Battery life

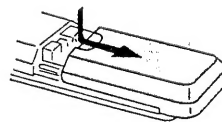
About half a year of normal operation can be expected when using the Sony SUM-3 (NS) batteries. When the batteries are exhausted, the remote commander can no longer operate the unit. If this happens, replace both batteries with new ones.

To avoid battery leakage

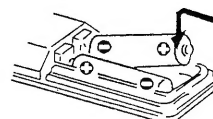
When the commander is not to be used for a long time, remove the batteries to avoid damage caused by battery leakage and corrosion.

Inserting the batteries into the remote commander

- 1 Open the cover.

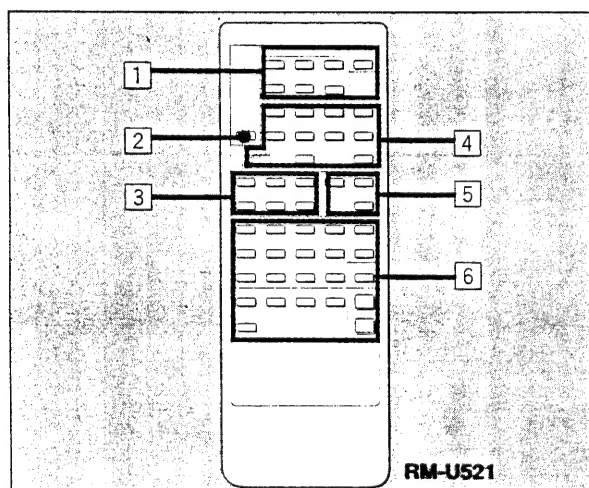


- 2 Insert two size-AA (R6) batteries with correct polarity



Remote Commander

The remote commander supplied with this unit can control the unit from a distance. The remote commander is divided into 6 sections according to the functions as shown below.



1 Power control block

SYSTEM OFF button: Turns off the power of the whole system: LDP, VTR, TV, and AUDIO.

LDP/VTR1/VTR2/VTR3/TV/AUDIO POWER buttons: Control the power of each unit.

2 MODE selector

Selects the function mode on the remote commander.

1: To select the functions indicated in light gray such as DECK, DAT, CD player and the SURROUND mode of amplifier.

2: To select the functions indicated in blue such as VTR, LDP (Laser disc player) and TV.

3 CDP/LDP control block

The combined CD/LD player can be controlled with LDP position.

▶: Play

⏸: Pause

■: Stop

D (disc) SKIP: Disc skip (for a CD player equipped with a multi-disc changer)

◀◀/▶▶: Manual search (only for LD player)

◀◀/▶▶: Locates a desired selection.

4 Tape deck/VCR control block

DECK/VTR selector

DECK A,B, and DAT: Selects Deck A, B or DAT deck.

VTR 1, 2, and 3: Set to the VTR 1, 2 or 3 according to your VCR setting.

1: Betamax VCRs

2: 8 mm VCRs

3: VHS VCRs

⏸: Pause

■: Stop

◀◀/▶▶: Fast winding

▶: Play

● (REC): Recording

ANT (antenna) TV/VTR button: Selects the output signal from the antenna terminal on the VCR, either a TV signal or VCR programs.

VTR CH (channel) +/- buttons: Select channel on the VCR.

5 Tuner/TV block

SHIFT and TUNER PRESET/ TV CH (channel) +/- buttons: Select a preset station of the tuner or a channel of the TV.

6 Amplifier/TV block

TV/VIDEO button: Selects the input signal of the TV. (for TV)

Program number (1 to 0) and ENTER buttons: Select the channel. (for TV)

SURROUND mode selectors (for the amplifier)

ON/OFF: Turns on/off the surround mode.

MODE: Selects the surround mode.

T.(Test) TONE: Generates a pink noise signal that is sent in succession to each speaker.

DELAY: Adjust the delay time.

FUNCTION selectors: Select an input source of the amplifier. (for the amplifier)

REAR VOL +/- buttons: Control the volume of rear speakers (surround level).

CENTER VOL/TV VOL +/- buttons: Control the volume of center speaker (surround level) or TV.

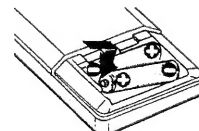
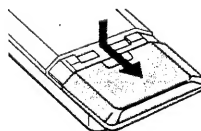
DBFB button: Turns on/off the DBFB (Dynamic Bass Feed Back). (for the amplifier)

MASTER VOL +/- buttons: Control the amplifier volume (for the amplifier).

Inserting the batteries into the remote commander

1 Open the cover.

2 Insert two size AA (R6) batteries with correct polarity.



Battery life

About half a year of normal operation can be expected when using the Sony SUM-3 (NS) batteries.

When the batteries are exhausted, the commander can no longer operate the unit. Replace both batteries with new ones.

To avoid battery leakage

When the commander is not to be used for a long period of time, remove the batteries to avoid damage caused by battery leakage and corrosion.

SECTION 2

IC PIN FUNCTIONS

• IC101 (μ PD75206GF-722-3BE)

Pin	Port	I/O	ACT	RESET	Outside	
1	RESET	I				
2	t0	O	H	High	L	DIGIT2
3	t1	O	H	High	L	DIGIT1
4	t2	O	H	High	L	DIGIT3
5	t3	O	H	High	L	DIGIT4
6	t4	O	H	High	L	DIGIT5
7	t5	O	H	High	L	DIGIT6
8	t6	O	H	High	L	DIGIT7
9	t7	O	H	High	L	DIGIT8
10	t8	O	H	High	L	DIGIT9
11	t9	O	H	High	L	NC
12	t10	O	L	High	L	REAR MUTE
13	t11	O	L	High	L	FRONT MUTE
14	t12	O	L	High	L	V-2 (NO USE)
15	t13	O	L	High	L	V-1 REC (NO USE)
16	t14	O	L	High	L	SURROUND A
17	t15	O	L	High	L	SURROUND B
18	Vload		—	High		— 30V
19	vpre		—	High		— 4V
20	s9	O	H	High	L	DBFB
21	s8	O	H	High	L	SEG1
22	s7	O	H	High	L	SEG2
23	s6	O	H	High	L	SEG3
24	s5	O	H	High	L	SEG4
25	s4	O	H	High	L	SEG5/KEY5 OUT 5
26	VDD			High		+ 5V
27	s3	O	H	High	L	SEG6/KEY4 OUT 4
28	s2	O	H	High	L	SEG7/KEY3 OUT 3
29	s1	O	H	High	L	SEG8/KEY2 OUT 2
30	s0	O	H	High	L	SEG9/KEY1 OUT 1
31	p00	I	H	In	L	STOP
32	p01	I	H	In	L	KEY IN 2

High : High-impedance status

In : Input status

Pin	Port	I/O	ACT	RESET	Outside	
33	p02	I	H	In	L	KEY IN 3
34	p03	I	H	In	L	KEY IN 4
35	p10	I	H	In	L	KEY IN 5
36	p11	I	H	In		RM-IN 1
37	p12	I	L	In		KEY IN 1
38	p13	I	L	In		POWER SW
39	p20	O	H	In	L	ST LC7535
40	p21	O	L	In	L	ST LV1001M
41	p22	O	H	In	L	VOL +
42	p23	O	H	In	L	VOL -
43	p30	O	H	In	L	VIDEO A
44	p31	O	H	In	L	VIDEO B
45	p32	O	H	In	L	VIDEO C
46	p33	O	H	In	L	AUTO LED
47	p60	O	H	In	L	CD CONTROL
48	p61	O	H	In	L	CLOCK
49	p62	O	H	In		DATA
50	p63	O	H	In		FRONT SP RELAY
51	p40	O	H	In	L	REAR SP RELAY
52	p41	O	H	In	L	CENTER SP RELAY
53	p42	O	L	In	L	CENTER MUTE
54	p43	O	H	In	L	POWER RELAY
55	ppo	O	H	In	L	P LOGIC 1
56	x1					
57	x2					
58	Vss					
59	xt1					
60	zt2					(NO USE)
61	p50	O	H	In		P LOGIC 2
62	p51	O	H	In		P LOGIC 3
63	p52	O	H	In		P LOGIC 4
64	p53	O	H	In		P LOGIC 5

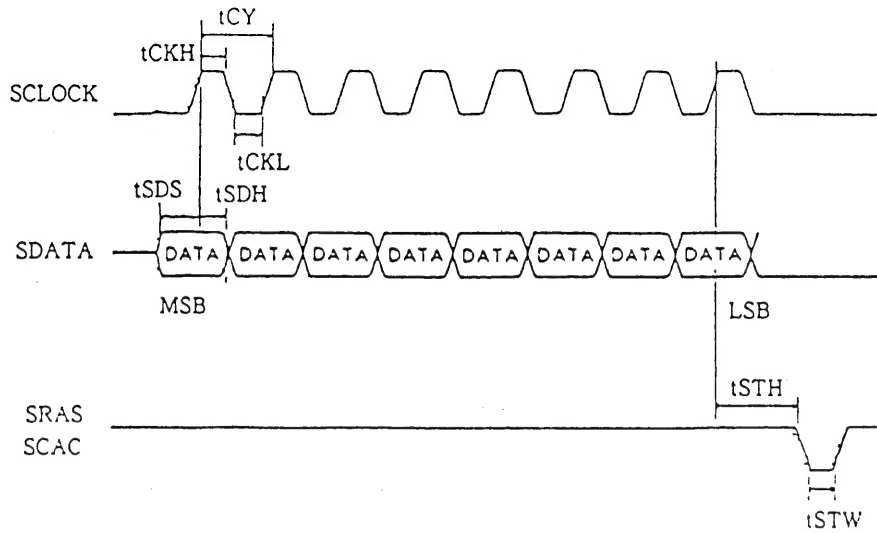
High : High-impedance status

In : Input status

• IC304 (LV100M)

Pin No.	Explanations
1	De-couple capacitor for threshold voltage
2, 64	Capacitor for smoothing of rectifier output
3	Capacitor for sliding band filter and Delayed output
4, 62	Capacitor for sliding band filter
5, 61	Capacitor for pre-emphasis
6, 60	Input filter for rectifier
7, 57	Input filter for rectifier
8	Reference voltage
9	Reference voltage
10	Mute control (no use)
11	Vcc
12	Output for V _{DD}
13	Clock input for serial input, data input for parallel input mode
14	Data input for serial input, data input for parallel input mode
15	Column address selection for serial input, data input for parallel input mode
16	Row address selection for serial input, data input for parallel input mode
18 to 32	Connection to memory device
24	Vss
33	X'tal resonator for oscillator
34	X'tal resonator for oscillator
35	Long or Short mode selection (no use)
36	Serial or Parallal mode selection
37	For test mode (no use)
38	Smoothing for NR rectifier
39	Smoothing for NR rectifier
40	Capacitor for weighting on side chain path
41	Input for variable resistor
42	NR output
43	7kHz low pass filter output
44	Input for NR
45	Capacitor for de-couple on NR
46	Delay output or NR output
47	Input for mute circuit (no use)
48	Output for mute circuit (no use)
49	Output for 7kHz low pass filter (no use)
50	Input for 7kHz low pass filter
51	GND
52	Input for right channel
53	Input for left channel
54	Capacitor for de-couple on Fixed matrix output
55	Noise shaping and delay input
56	Noise shaping output
57	Delay input signal mode select switch (L + R/L - R)
58	Filter for supply voltage on comparator
63	Capacitor for sliding band filter and local decoder output

Input Address Port Timing
SHORT MODE



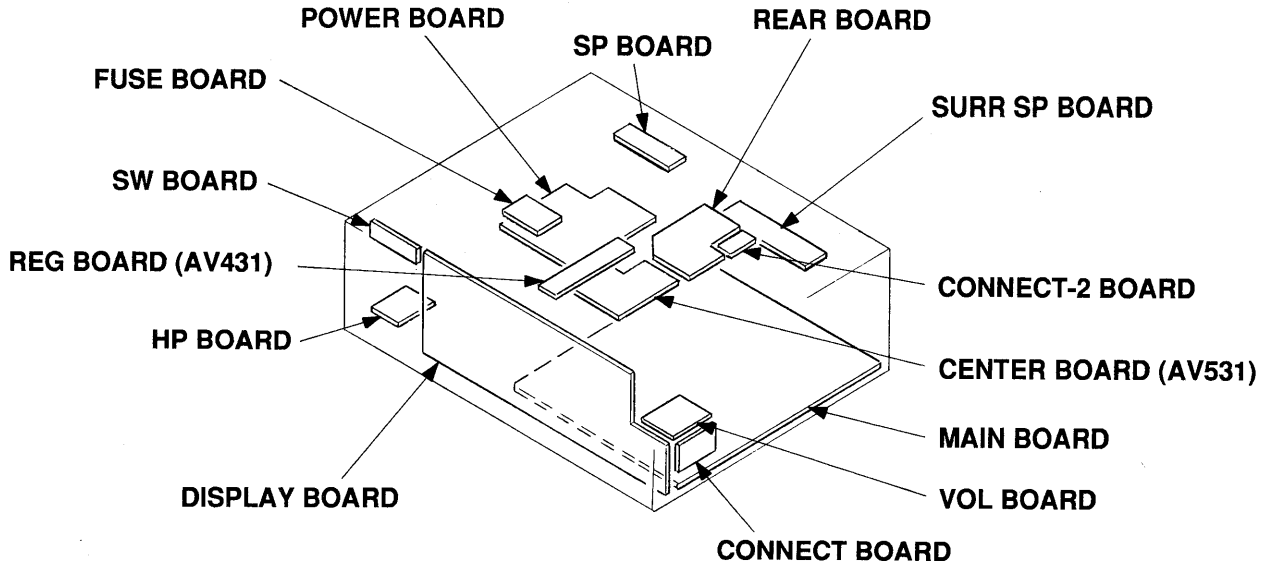
In case of short mode, delay time setting is set in above timing. The data loaded to SDATA is written on the leading edge timing. In order to select that the data latch for row address strobe or column address strobe is loaded, SRAS or SCAS port is controlled.

When changing delay time setting, meaningless data on a memory are read. this causes the pop noise. when SRAS or SCAS is controlled, mute circuit (pin 55 is input, pin 56 is output) is activated. Mute time is the same as the delay time which is set at that time. (Serial data input mode only, On parallel data input mode, mute circuit is activated by using the mute control port pin 18.)

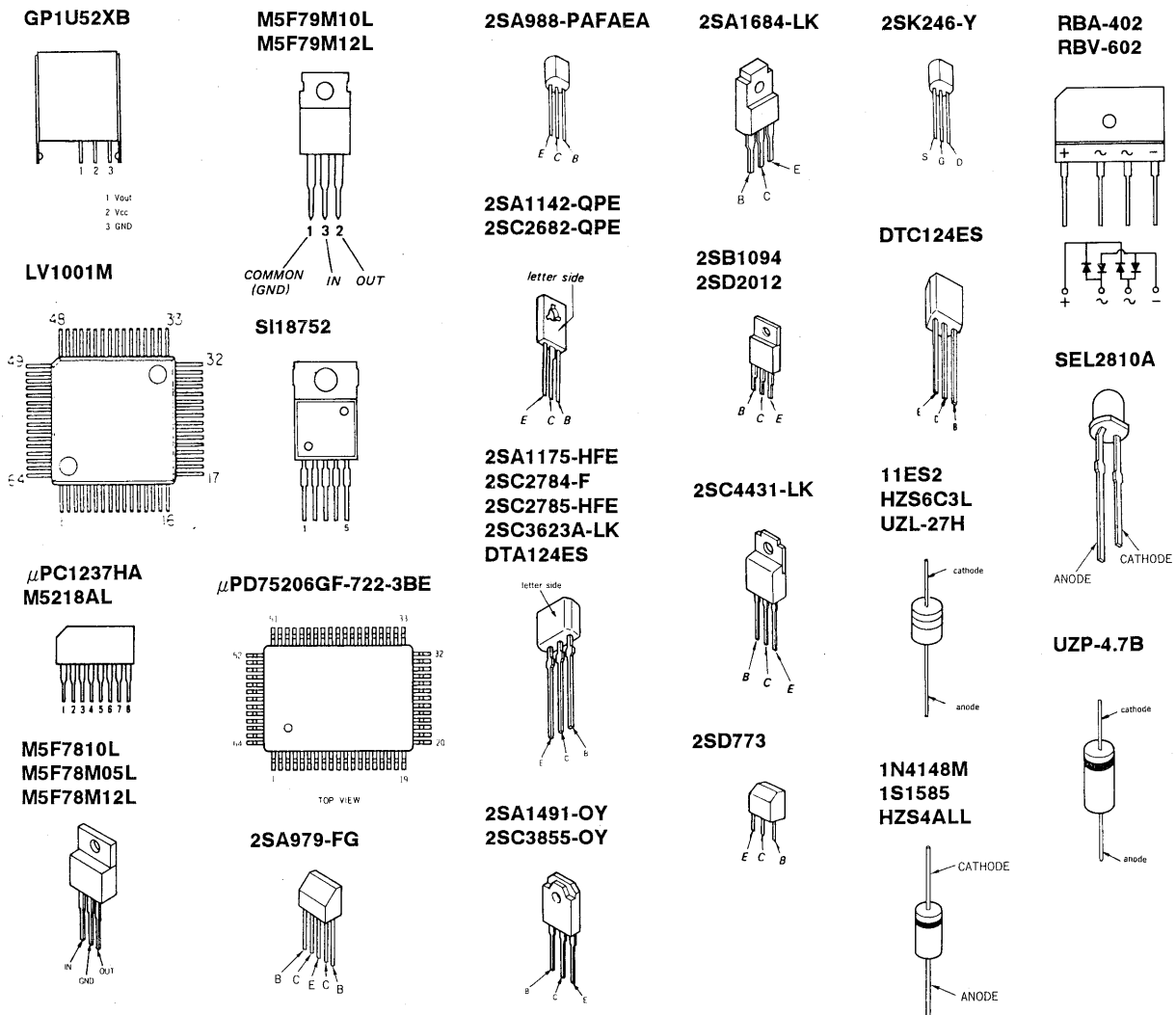
On long mode, input data number is 9, the way of setting delay time is same.

SECTION 3 DIAGRAMS

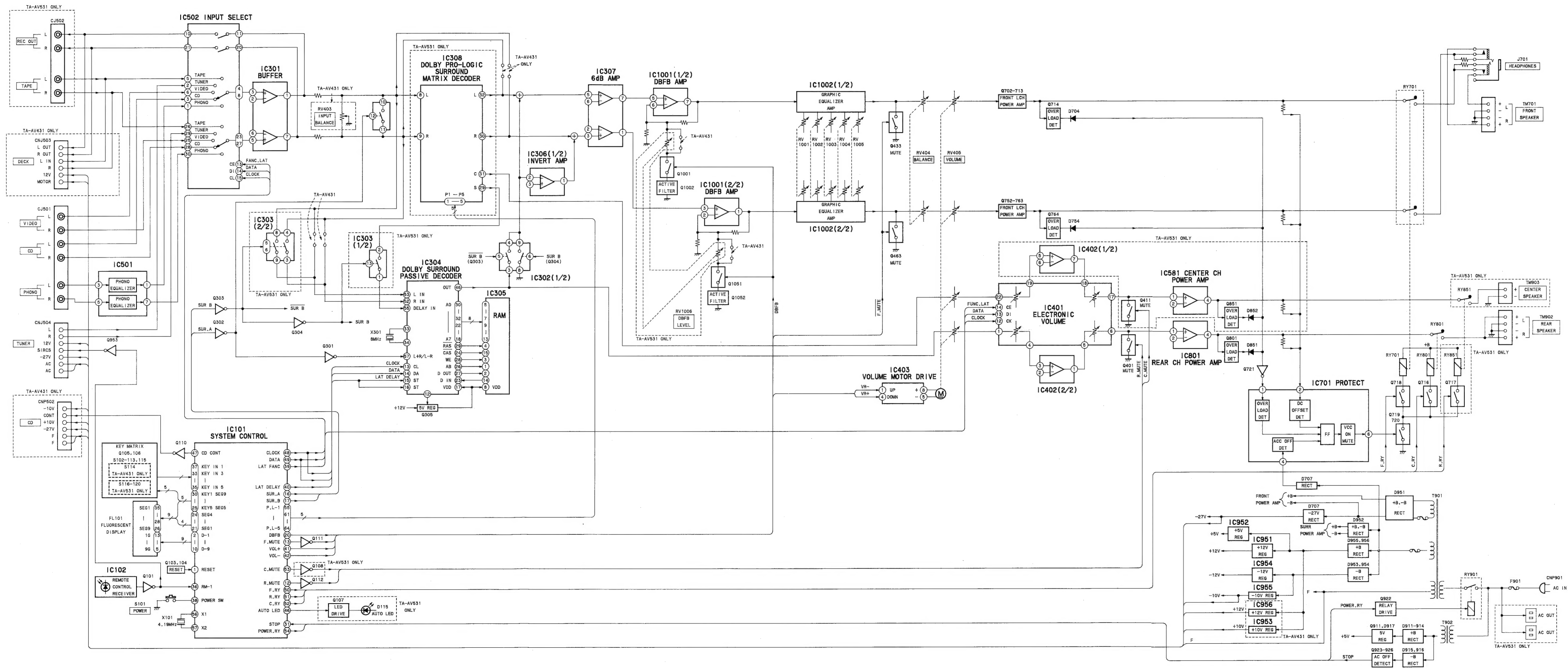
3-1. CIRCUIT BOARDS LOCATION



3-2. SEMICONDUCTOR LEAD LAYOUTS



3-3. BLOCK DIAGRAM



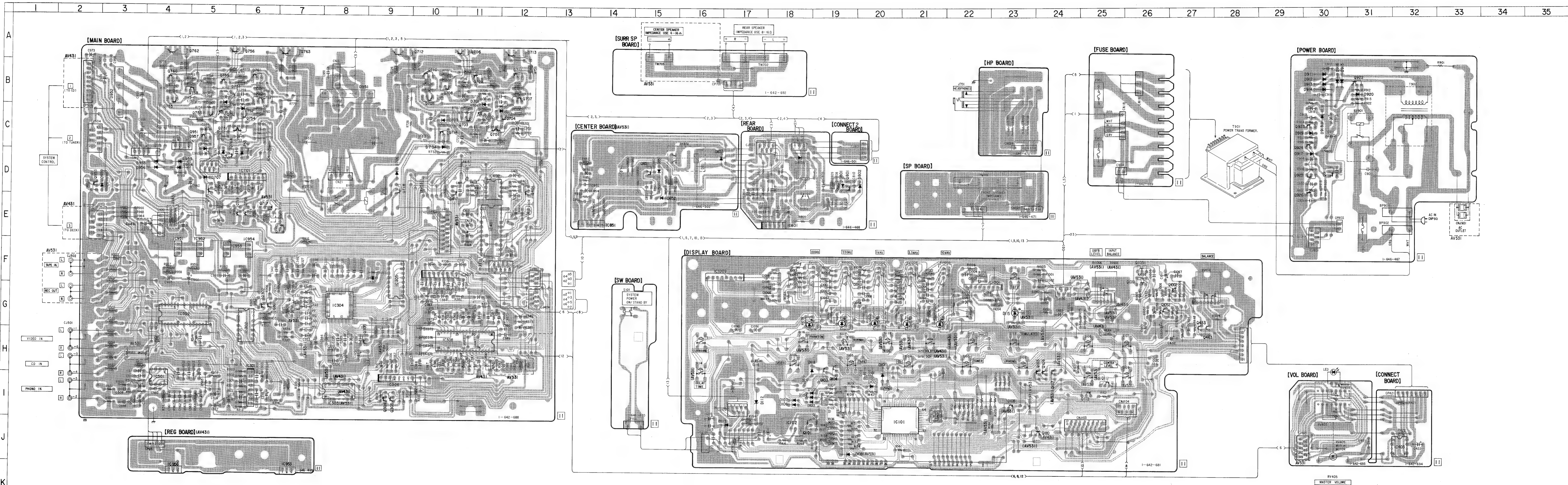
3-4. PRINTED WIRING BOARD
• MAIN SECTION
• See page 9 for Circuit Boards Location and Semiconductor Lead Layouts.

SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D101	H-20	Q101	J-18
D102	I-20	Q103	H-19
D103	I-18	Q104	H-19
D104	I-18	Q105	H-24
D105	I-18	Q106	H-24
D106	I-18	Q107	H-24
D107	I-18	Q108	I-23
D108	J-19	Q110	J-24
D111	H-18	Q111	I-25
D112	I-17	Q112	I-25
D113	J-17	Q301	G-6
D115	G-23	Q302	G-6
D701	B-11	Q303	H-9
D702	C-12	Q304	H-9
D703	C-10	Q305	H-9
D704	C-10	Q401	D-12
D706	D-9	Q411	D-10
D707	D-5	Q433	G-27
D751	B-5	Q483	G-27
D752	C-6	Q701	C-11
D753	D-6	Q702	C-11
D754	D-5	Q703	C-11
D801	D-19	Q704	C-12
D802	D-20	Q705	B-10
D803	D-18	Q706	A-11
D851	D-15	Q707	B-12
D852	E-15	Q708	B-10
D853	D-16	Q709	B-11
D911	B-30	Q710	B-10
D912	B-30	Q711	B-12
D913	B-30	Q712	A-9
D914	B-30	Q713	A-12
D915	B-30	Q714	C-10
D916	B-30	Q716	E-7
D917	C-30	Q717	E-6
D918	C-30	Q718	D-9
D919	C-30	Q719	D-9
D920	B-31	Q720	E-6
D951	B-6	Q721	D-5
D952	B-3	Q751	C-5
D953	D-4	Q752	C-5
D954	D-4	Q753	C-5
D955	D-4	Q754	C-6
D956	D-4	Q755	B-4
D957	C-5	Q756	A-6
D959	D-2	Q757	B-6
		Q758	B-6
		Q759	B-6
IC101	J-20	Q780	B-4
IC102	J-18	Q781	B-6
IC301	H-6	Q782	A-4
IC302	G-6	Q783	A-7
IC303	H-8	Q784	D-5
IC304	G-8	Q801	D-19
IC305	F-9	Q851	D-15
IC306	I-9	Q911	C-30
IC307	F-11	Q922	B-31
IC308	H-10	Q923	C-30
IC401	E-11	Q924	C-30
IC402	D-11	Q925	D-30
IC403	J-32	Q926	D-30
IC501	I-4	Q951	C-5
IC502	G-4	Q953	D-2
IC701	D-6	Q1001	F-26
IC851	E-18	Q1002	C-27
IC851	F-4	Q1051	F-26
IC852	F-5	Q1052	G-26
IC953	K-7		
IC954	F-6		
IC955	F-5		
IC955	K-4		
IC1001	G-22		
IC1002	F-16		


Note on Mounting Diagram:

- : Parts extracted from the component side.
- : Jumper wire connected to the ground pattern on the component side.
- ⋯ : Pattern on the side which is seen.



Note on Schematic Diagram:

Note:

- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- : nonflammable resistor.

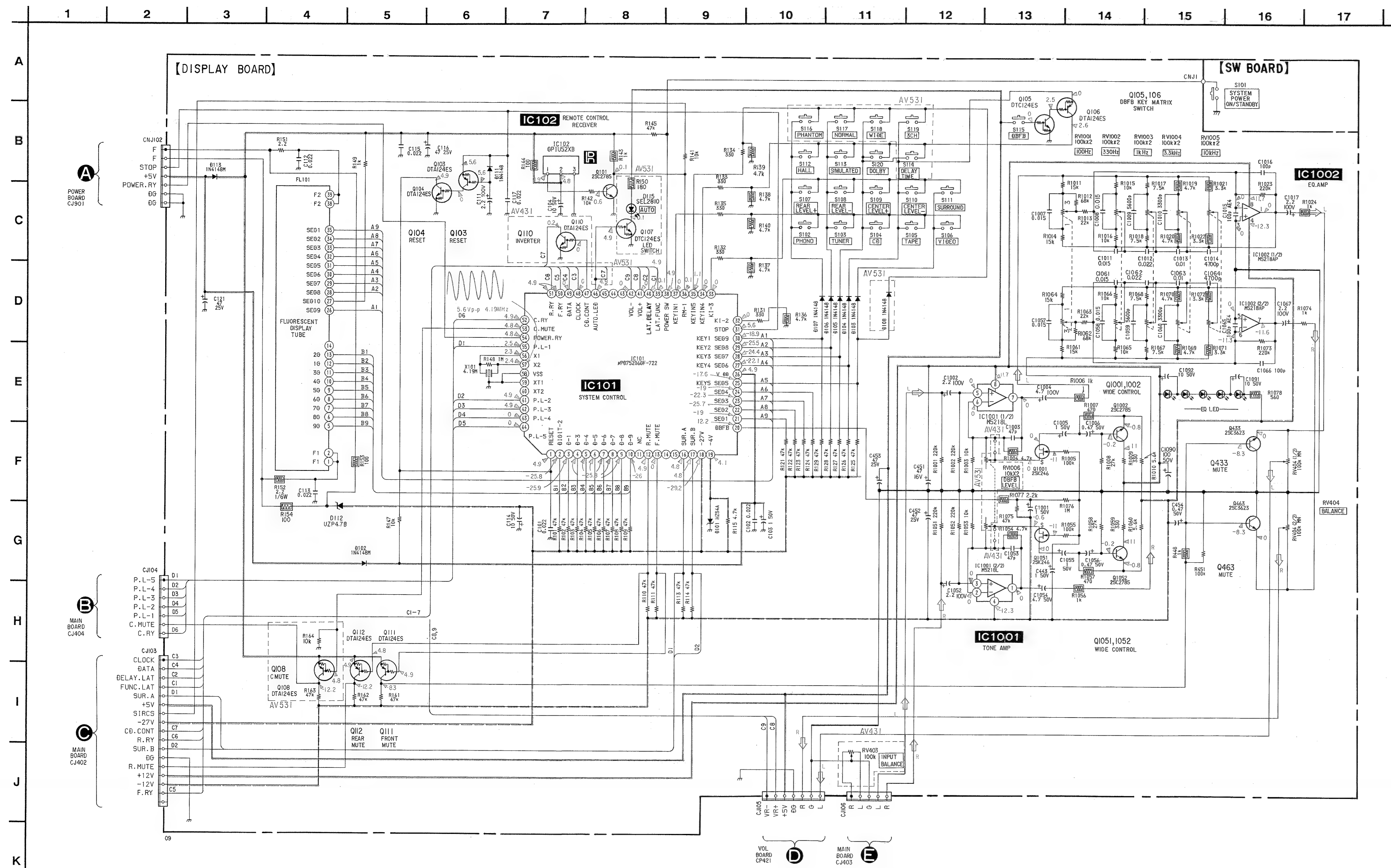
Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- \circ : B+ line
- \circ : B- line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark : CD
- Voltages are taken with a VOM (input impedance 10 $\text{M}\Omega$).
- Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \Rightarrow : TUNER

3-6. SCHEMATIC DIAGRAM

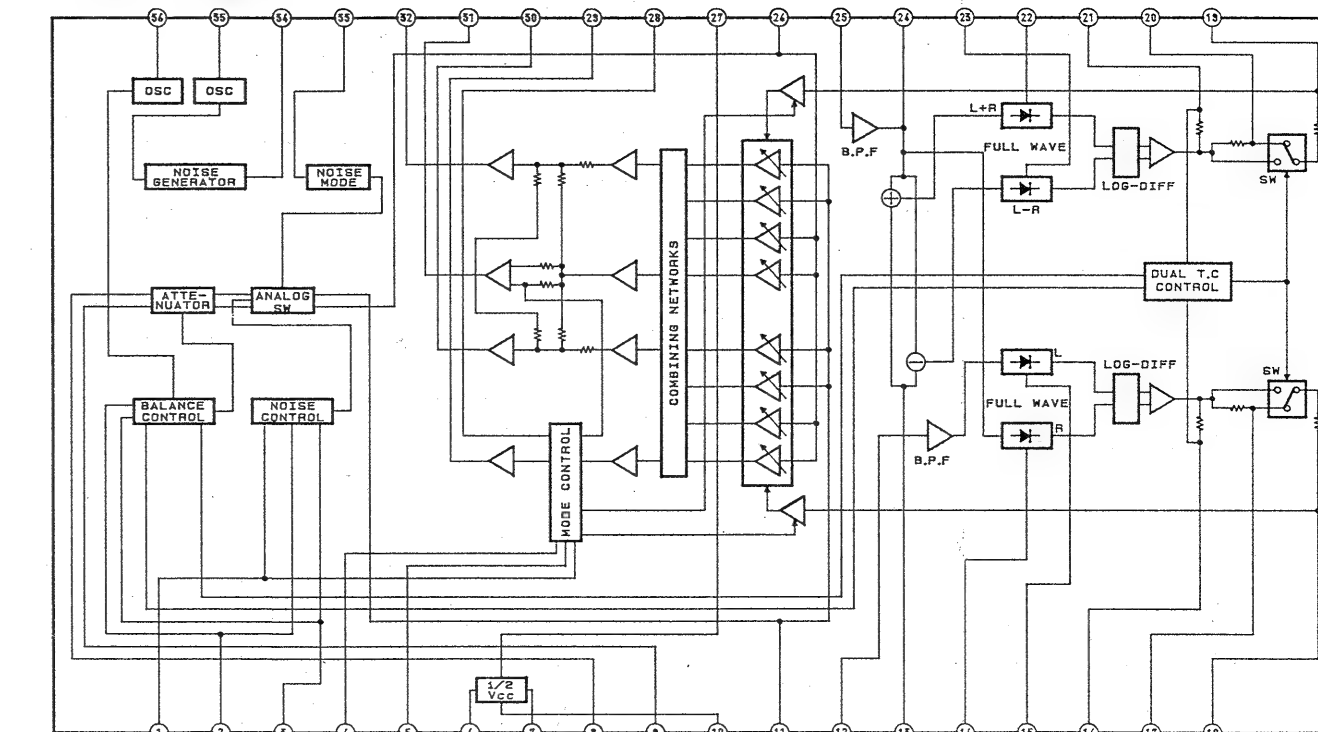
• DISPLAY SECTION

• See page 23, 24 for IC Block Diagrams.

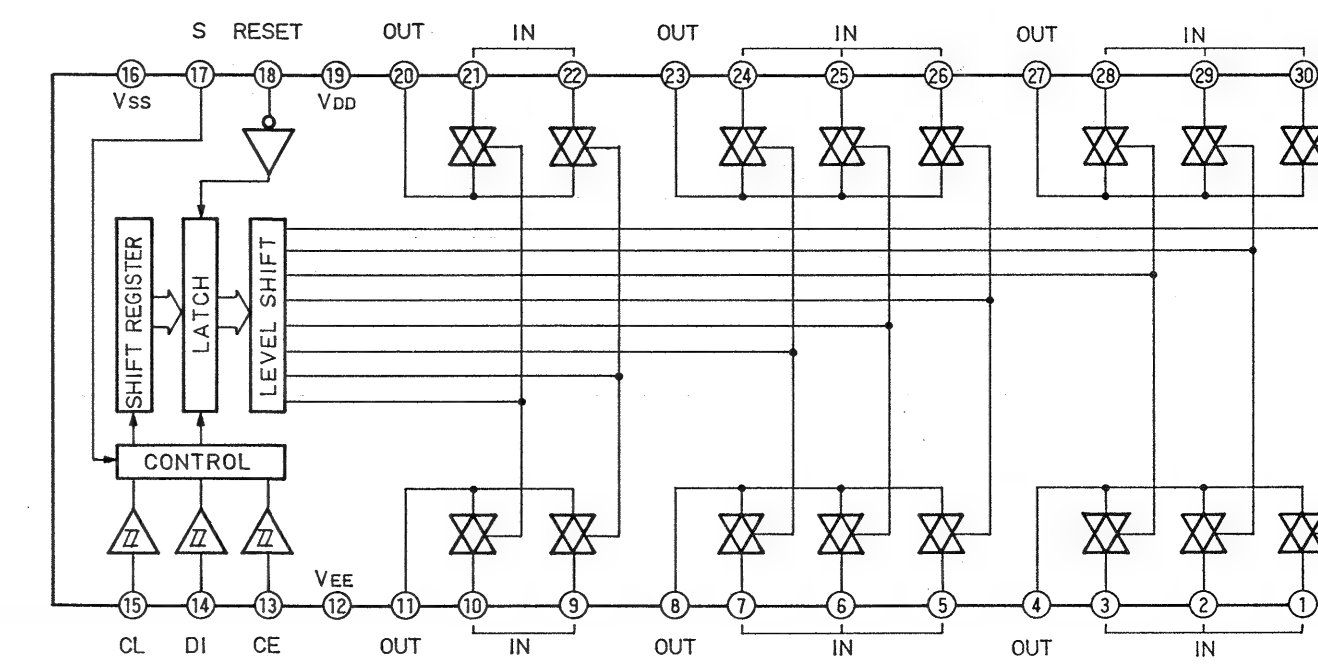


3-7. IC BLOCK DIAGRAMS

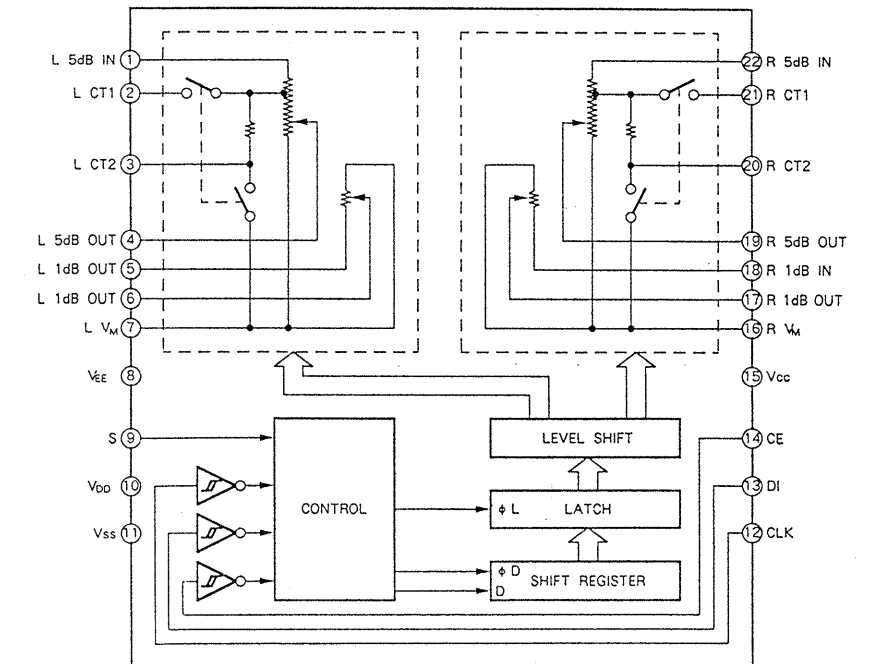
• IC308 LA2780N



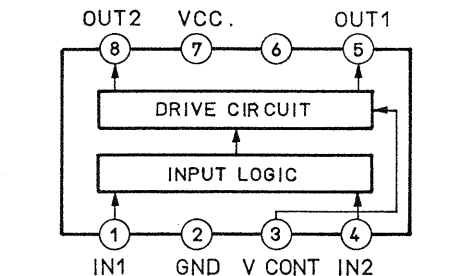
• IC502 LC7822



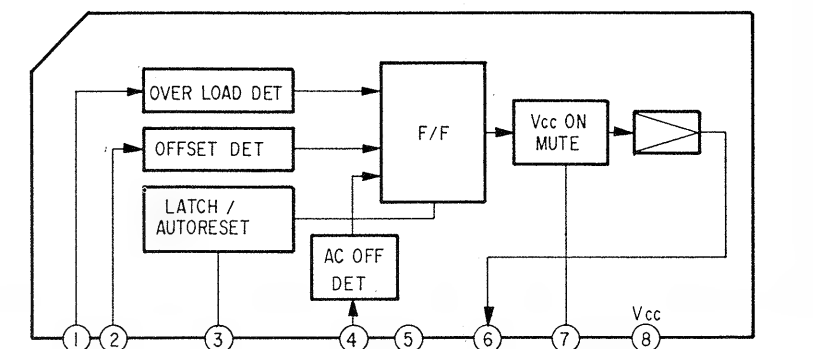
• IC401 LC7535



• IC403 LB1639



• IC701 uPC1237HA



EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
Example:

KNOB, BALANCE (WHITE) . . . (RED)

↑
Parts color



↑
Cabinet's color

- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

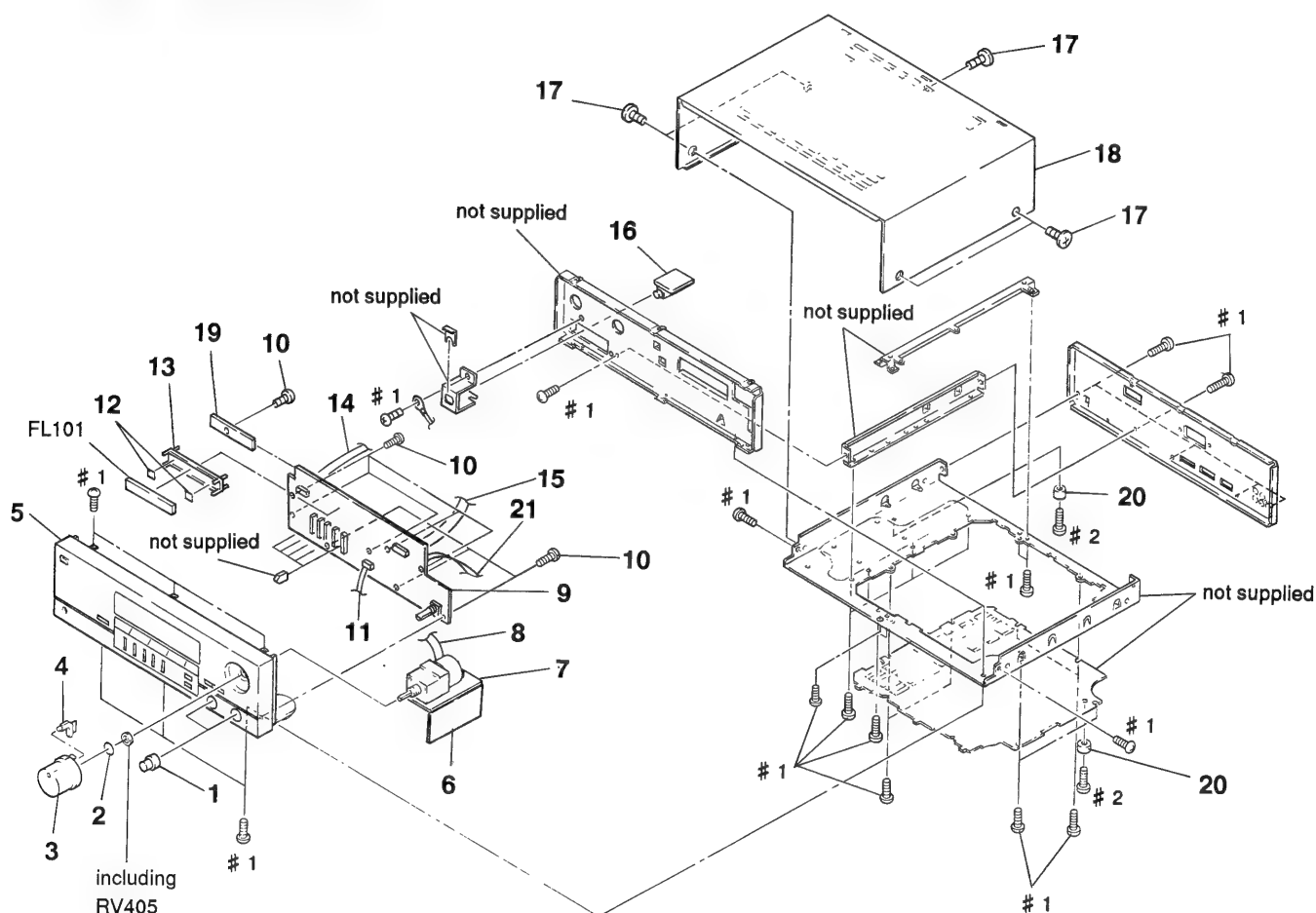
- The mechanical parts with no reference number in the exploded views are not supplied.

- Hardware (# mark) list is given in the last of this parts list.

- Mexican model is abbreviated as MX.

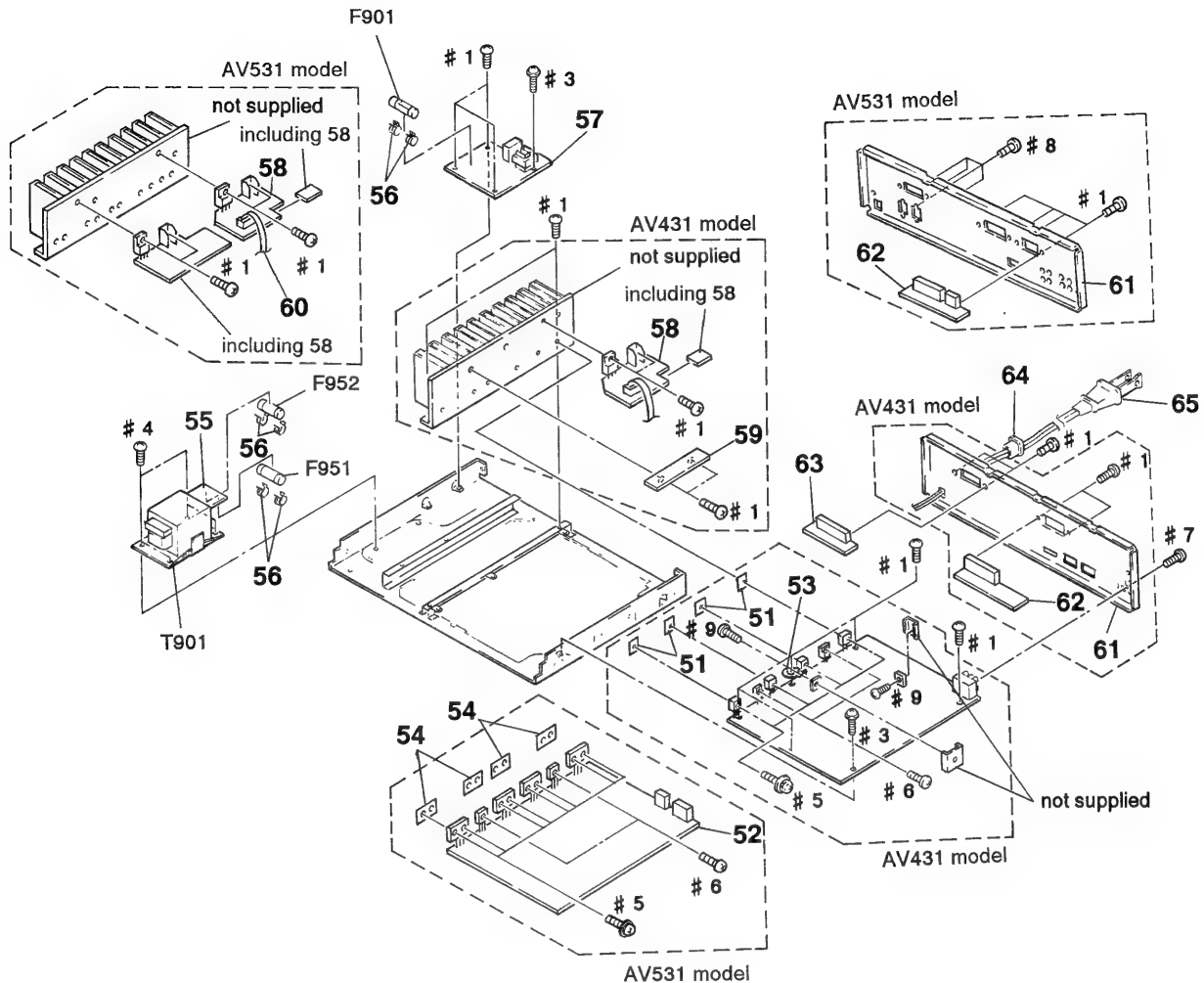
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.



4-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-949-640-01	KNOB (DIA. 21)		* 12	4-921-941-11	CUSHION (FL)	
2	3-350-426-01	SPRING, RING					
3	4-949-659-01	KNOB (VOL-NEW)		* 13	4-943-107-11	HOLDER (FL TUBE)	
4	4-943-092-01	PLATE (VOL), LIGHT GUIDE		14	1-590-241-11	WIRE, FLAT TYPE (7 CORE) (AV431)	
5	X-4943-356-1	PANEL ASSY, FRONT (AV431)			1-690-114-11	WIRE, FLAT TYPE (7 CORE) (AV531)	
				15	1-590-487-11	WIRE, FLAT TYPE (17 CORE)	
5	X-4943-357-1	PANEL ASSY, FRONT (AV531)		* 16	1-646-472-11	HP BOARD	
* 6	1-642-694-11	CONNECT BOARD					
* 7	1-642-693-11	VOL BOARD		17	3-363-099-01	SCREW (CASE 3 TP2)	
8	1-690-588-31	WIRE, FLAT TYPE (9 CORE) (AV531)		18	4-931-031-11	CASE	
	1-696-413-11	WIRE (FLAT TYPE) (7 CORE) (AV431)		* 19	1-646-470-11	SW BOARD	
				20	X-4941-229-1	FOOT ASSY (F2112S-M)	
* 9	A-4360-009-A	DISPLAY BOARD, COMPLETE (AV431)		* 21	1-590-769-11	WIRE, FLAT TYPE (7 CORE)	
*	A-4360-016-A	DISPLAY BOARD, COMPLETE (AV531)					
10	4-951-620-01	SCREW (2.6X8), +BVTP		FL101	1-590-663-11	INDICATOR TUBE, FLUORESCENT	
11	1-575-666-11	WIRE, FLAT TYPE (5 CORE)					

4-2. BOARD SECTION



The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
51	4-911-232-01	SHEET, INSULATING (AV431)		* 61	4-956-624-11	PANEL, BACK (AV431:MX)	
* 52	A-4360-347-A	MAIN BOARD, COMPLETE (AV431)		*	4-956-624-23	PANEL, BACK (AV531)	
*	A-4360-464-A	MAIN BOARD, COMPLETE (AV531)		* 62	A-4360-012-A	SURR SP BOARD, COMPLETE (AV431)	
* 53	4-942-204-01	PLATE, GROUND		*	A-4360-017-A	SURR SP BOARD, COMPLETE (AV531)	
54	4-885-901-31	SHEET, RADIATION (AV531)		* 63	1-646-471-11	SP BOARD	
* 55	1-642-689-11	FUSE BOARD		△*64	3-703-244-00	BUSHING (2104), CORD	
56	1-533-217-31	HOLDER, FUSE		△CNP901	1-551-478-00	CORD, POWER	
* 57	A-4360-014-A	POWER BOARD, COMPLETE (AV431)		△F901	1-532-749-11	FUSE, GLASS TUBE (8A)	
*	A-4360-465-A	POWER BOARD, COMPLETE (AV531)		△F951	1-576-109-11	FUSE (5A 125V)	
* 58	A-4360-012-A	REAR BOARD, COMPLETE (AV431)		△F952	1-576-109-11	FUSE (5A 125V)	
* 58	A-4360-017-A	REAR BOARD, COMPLETE (AV531)		△T901	1-450-806-11	TRANSFORMER, POWER (AV431)	
* 59	1-646-470-11	REG BOARD (AV431)		△	1-450-808-11	TRANSFORMER, POWER (AV531)	
* 60	1-590-769-11	WIRE, FLAT TYPE (7 CORE)					
* 61	4-956-624-01	PANEL, BACK (AV431:US)					

SECTION 5 ELECTRICAL PARTS LIST

NOTE:

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE) ... (RED)

Parts color

Cabinet's color

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• SEMICONDUCTORS

In each case, u: μ , for example:uA...: μ A..., uPA...: μ PA...,uPB...: μ PB..., uPC...: μ PC...,uPD...: μ PD...

• CAPACITORS

uF : μ F

• COILS

uH : μ H

- Hardware (# mark) list is given in the last of this parts list.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
		CENTER BOARD (AV531)					

		Refer to REAR BOARD, COMPLETE					

*	1-642-694-11	CONNECT BOARD					

		< CAPACITOR >					
C422	1-126-154-11	ELECT 47uF 20% 6.3V		C111	1-124-925-11	ELECT 2.2uF 20% 100V	
		< PIN, CONNECTOR >		C112	1-164-097-11	CERAMIC 0.022uF 50V	
CP421	1-569-132-11	PIN, CONNECTOR 7P		C113	1-164-097-11	CERAMIC 0.022uF 50V	
		< IC >		C114	1-124-907-11	ELECT 10uF 20% 50V	
IC403	8-759-820-62	IC LB1639		C115	1-164-097-11	CERAMIC 0.022uF 50V	
		< RESISTOR >		C116	1-124-477-11	ELECT 47uF 20% 25V	
R421	1-249-409-11	CARBON 220 5% 1/4W F		C117	1-164-097-11	CERAMIC 0.022uF 50V	
R422	1-249-393-11	CARBON 10 5% 1/4W F		C121	1-124-477-11	ELECT 47uF 20% 25V	
		*****		C443	1-124-903-11	ELECT 1uF 20% 50V	
		CONNECT 2 BOARD		C451	1-124-589-11	ELECT 47uF 20% 16V	
		*****		C452	1-124-477-11	ELECT 47uF 20% 25V	
		Refer to REAR BOARD, COMPLETE		C453	1-124-477-11	ELECT 47uF 20% 25V	
		*****		C454	1-124-465-00	ELECT 0.47uF 20% 50V	
*	A-4360-009-A	DISPLAY BOARD, COMPLETE (AV431)		C1001	1-124-903-11	ELECT 1uF 20% 50V	
		*****		C1002	1-124-925-11	ELECT 2.2uF 20% 100V	
*	A-4360-016-A	DISPLAY BOARD, COMPLETE (AV531)		C1003	1-162-215-31	CERAMIC 47PF 5% 50V	
		*****		C1004	1-124-927-11	ELECT 4.7uF 20% 100V	
*	4-921-941-01	CUSHION (FL)		C1005	1-124-903-11	ELECT 1uF 20% 50V	
*	4-943-107-11	HOLDER (FL TUBE) (AV431)		C1006	1-124-902-00	ELECT 0.47uF 20% 50V	
*	4-949-779-11	HOLDER (FL TUBE) (AV531)		C1007	1-130-485-00	MYLAR 0.015uF 5% 50V	
		< CAPACITOR >		C1008	1-130-485-00	MYLAR 0.015uF 5% 50V	
C101	1-164-097-11	CERAMIC 0.022uF 50V		C1009	1-130-480-00	MYLAR 0.0056uF 5% 50V	
C102	1-164-097-11	CERAMIC 0.022uF 50V		C1009	1-137-437-11	FILM 0.0056uF 5% 50V	
C103	1-124-903-11	ELECT 1uF 20% 50V		C1010	1-130-477-00	MYLAR 0.0033uF 5% 50V	
C104	1-124-907-11	ELECT 10uF 20% 50V		C1011	1-130-485-00	MYLAR 0.015uF 5% 50V	
				C1012	1-130-487-00	MYLAR 0.022uF 5% 50V	
				C1013	1-130-483-00	MYLAR 0.01uF 5% 50V	
				C1014	1-130-479-00	MYLAR 0.0047uF 5% 50V	
				C1015	1-162-282-31	CERAMIC 100PF 10% 50V	
				C1016	1-162-282-31	CERAMIC 100PF 10% 50V	
				C1017	1-124-925-11	ELECT 2.2uF 20% 100V	
				C1052	1-124-925-11	ELECT 2.2uF 20% 100V	
				C1053	1-162-215-31	CERAMIC 47PF 5% 50V	
				C1054	1-126-163-11	ELECT 4.7uF 20% 50V	
				C1055	1-126-160-11	ELECT 1uF 20% 50V	
				C1056	1-124-465-00	ELECT 0.47uF 20% 50V	
				C1057	1-130-485-00	MYLAR 0.015uF 5% 50V	
				C1058	1-130-485-00	MYLAR 0.015uF 5% 50V	
				C1059	1-130-480-00	MYLAR 0.0056uF 5% 50V	
				C1060	1-130-477-00	MYLAR 0.0033uF 5% 50V	
				C1061	1-130-485-00	MYLAR 0.015uF 5% 50V	
				C1062	1-130-487-00	MYLAR 0.022uF 5% 50V	
				C1063	1-130-483-00	MYLAR 0.01uF 5% 50V	

DISPLAY

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C1064	1-130-479-00	MYLAR 0.0047uF 5% 50V		Q108	8-729-900-63	TRANSISTOR DTA124ES (AV531)	
C1065	1-162-282-31	CERAMIC 100PF 10% 50V		Q110	8-729-900-36	TRANSISTOR DTC124ES (AV431)	
C1066	1-162-282-31	CERAMIC 100PF 10% 50V		Q111	8-729-900-63	TRANSISTOR DTA124ES	
				Q112	8-729-900-63	TRANSISTOR DTA124ES	
C1067	1-124-925-11	ELECT 2.2uF 20% 100V		Q433	8-729-141-30	TRANSISTOR 2SC3623A-LK	
C1090	1-124-478-11	ELECT 100uF 20% 25V		Q463	8-729-141-30	TRANSISTOR 2SC3623A-LK	
C1091	1-124-907-11	ELECT 10uF 20% 50V		Q1001	8-729-224-61	TRANSISTOR 2SK246-Y	
C1092	1-124-907-11	ELECT 10uF 20% 50V		Q1002	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q1051	8-729-224-61	TRANSISTOR 2SK246-Y	
		< SOCKET >		Q1052	8-729-119-78	TRANSISTOR 2SC2785-HFE	
* CJ101	1-565-480-11	CONNECTOR, BOARD TO BOARD 4P				< RESISTOR >	
CJ102	1-691-644-11	SOCKET, CONNECTOR 7P		R101	1-249-437-11	CARBON 47K 5% 1/4W	
CJ103	1-691-649-11	SOCKET, CONNECTOR 17P		R102	1-249-437-11	CARBON 47K 5% 1/4W	
CJ104	1-691-644-11	SOCKET, CONNECTOR 7P (AV531)		R103	1-249-437-11	CARBON 47K 5% 1/4W	
* CJ105	1-561-651-00	SOCKET, CONNECTOR 7P		R104	1-249-437-11	CARBON 47K 5% 1/4W	
				R105	1-249-437-11	CARBON 47K 5% 1/4W	
* CJ106	1-568-824-11	SOCKET, CONNECTOR 5P		R106	1-249-437-11	CARBON 47K 5% 1/4W	
* CJ901	1-568-826-11	SOCKET, CONNECTOR 7P (AV431)		R107	1-249-437-11	CARBON 47K 5% 1/4W	
		< DIODE >		R108	1-249-437-11	CARBON 47K 5% 1/4W	
D101	8-719-985-53	DIODE HZS4ALL		R109	1-249-437-11	CARBON 47K 5% 1/4W	
D102	8-719-987-63	DIODE 1N4148M		R110	1-249-437-11	CARBON 47K 5% 1/4W	
D103	8-719-987-63	DIODE 1N4148M		R111	1-249-437-11	CARBON 47K 5% 1/4W	
D104	8-719-987-63	DIODE 1N4148M		R113	1-249-437-11	CARBON 47K 5% 1/4W	
D105	8-719-987-63	DIODE 1N4148M		R114	1-249-437-11	CARBON 47K 5% 1/4W	
				R115	1-249-425-11	CARBON 4.7K 5% 1/4W F	
D106	8-719-987-63	DIODE 1N4148M		R121	1-249-437-11	CARBON 47K 5% 1/4W	
D107	8-719-987-63	DIODE 1N4148M		R122	1-249-437-11	CARBON 47K 5% 1/4W	
D108	8-719-987-63	DIODE 1N4148M (AV531)		R123	1-249-437-11	CARBON 47K 5% 1/4W	
D111	8-719-987-63	DIODE 1N4148M		R124	1-249-437-11	CARBON 47K 5% 1/4W	
D112	8-719-014-48	DIODE UZP-4.7B		R125	1-249-437-11	CARBON 47K 5% 1/4W	
				R126	1-249-437-11	CARBON 47K 5% 1/4W	
D113	8-719-987-63	DIODE 1N4148M		R127	1-249-437-11	CARBON 47K 5% 1/4W	
D115	8-719-301-49	LED SEL2810A (AV531)		R128	1-249-437-11	CARBON 47K 5% 1/4W	
		< INDICATOR >		R129	1-249-437-11	CARBON 47K 5% 1/4W	
FL101	1-519-663-12	INDICATOR TUBE, FLUORESCENT (AV431)		R131	1-249-411-11	CARBON 330 5% 1/4W	
FL101	1-519-727-11	INDICATOR TUBE, FLUORESCENT (AV531)		R132	1-249-411-11	CARBON 330 5% 1/4W	
		< IC >		R133	1-249-411-11	CARBON 330 5% 1/4W	
IC101	8-759-062-41	IC uPD75206GF-722-3BE		R134	1-249-411-11	CARBON 330 5% 1/4W	
IC102	8-749-920-83	IC GP1U52XB		R135	1-249-411-11	CARBON 330 5% 1/4W	
IC1001	8-759-634-50	IC M5218AL		R136	1-249-425-11	CARBON 4.7K 5% 1/4W F	
IC1002	8-759-634-50	IC M5218AL		R137	1-249-425-11	CARBON 4.7K 5% 1/4W F	
		< TRANSISTOR >		R138	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q101	8-729-119-78	TRANSISTOR 2SC2785-HFE		R139	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q103	8-729-900-63	TRANSISTOR DTA124ES		R140	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q104	8-729-900-36	TRANSISTOR DTC124ES		R141	1-249-429-11	CARBON 10K 5% 1/4W	
Q105	8-729-900-36	TRANSISTOR DTC124ES		R142	1-249-429-11	CARBON 10K 5% 1/4W	
Q106	8-729-900-63	TRANSISTOR DTA124ES		R143	1-249-417-11	CARBON 1K 5% 1/4W F	
				R144	1-249-405-11	CARBON 100 5% 1/4W F	
Q107	8-729-900-36	TRANSISTOR DTC124ES (AV531)		R145	1-249-437-11	CARBON 47K 5% 1/4W	

Ref.No.	Part No.	Description	Remark			Ref.No.	Part No.	Description	Remark		
R147	1-249-429-11	CARBON	10K	5%	1/4W	R1061	1-249-431-11	CARBON	15K	5%	1/4W
R148	1-247-903-00	CARBON	1M	5%	1/4W	R1062	1-249-439-11	CARBON	68K	5%	1/4W
R149	1-249-417-11	CARBON	1K	5%	1/4W F	R1063	1-249-433-11	CARBON	22K	5%	1/4W
R150	1-249-408-11	CARBON	180	5%	1/4W F	R1064	1-249-431-11	CARBON	15K	5%	1/4W
					(AV531)	R1065	1-249-429-11	CARBON	10K	5%	1/4W
R151	1-249-385-11	CARBON	2.2	5%	1/6W F	R1066	1-249-429-11	CARBON	10K	5%	1/4W
R152	1-249-385-11	CARBON	2.2	5%	1/6W F	R1067	1-247-852-11	CARBON	7.5K	5%	1/4W
R153	1-249-405-11	CARBON	100	5%	1/4W F	R1068	1-247-852-11	CARBON	7.5K	5%	1/4W
R154	1-249-405-11	CARBON	100	5%	1/4W F	R1069	1-249-425-11	CARBON	4.7K	5%	1/4W F
R161	1-249-437-11	CARBON	47K	5%	1/4W	R1070	1-249-425-11	CARBON	4.7K	5%	1/4W F
R162	1-249-437-11	CARBON	47K	5%	1/4W	R1071	1-249-423-11	CARBON	3.3K	5%	1/4W F
R163	1-249-437-11	CARBON	47K	5%	1/4W	R1072	1-249-423-11	CARBON	3.3K	5%	1/4W F
R164	1-249-429-11	CARBON	10K	5%	1/4W	R1073	1-247-887-00	CARBON	220K	5%	1/4W
					(AV531)	R1074	1-249-417-11	CARBON	1K	5%	1/4W F
R448	1-249-417-11	CARBON	1K	5%	1/4W F	R1075	1-249-437-11	CARBON	47K	5%	1/4W
R451	1-249-441-11	CARBON	100K	5%	1/4W	R1076	1-247-903-00	CARBON	1M	5%	1/4W
R1001	1-247-887-00	CARBON	220K	5%	1/4W	R1077	1-249-421-11	CARBON	2.2K	5%	1/4W F
R1002	1-247-887-00	CARBON	220K	5%	1/4W	R1078	1-249-414-11	CARBON	560	5%	1/4W F
R1003	1-249-429-11	CARBON	10K	5%	1/4W						
R1004	1-249-425-11	CARBON	4.7K	5%	1/4W F	< VARIABLE RESISTOR >					
R1005	1-249-441-11	CARBON	100K	5%	1/4W	RV403	1-223-307-11	RES, VAR, CARBON 100K/100K			
R1006	1-249-417-11	CARBON	1K	5%	1/4W F						(AV431)
R1007	1-249-413-11	CARBON	470	5%	1/4W F	RV404	1-238-965-21	RES, VAR, CARBON 100K/100K			
R1008	1-249-434-11	CARBON	27K	5%	1/4W	RV1001	1-223-262-11	RES, VAR, SLIDE 100K/100K			
R1009	1-249-411-11	CARBON	330	5%	1/4W	RV1002	1-223-262-11	RES, VAR, SLIDE 100K/100K			
R1010	1-249-426-11	CARBON	5.6K	5%	1/4W	RV1003	1-223-262-11	RES, VAR, SLIDE 100K/100K			
R1011	1-249-431-11	CARBON	15K	5%	1/4W	RV1004	1-223-262-11	RES, VAR, SLIDE 100K/100K			
R1012	1-249-439-11	CARBON	68K	5%	1/4W	RV1005	1-223-262-11	RES, VAR, SLIDE 100K/100K			
R1013	1-249-433-11	CARBON	22K	5%	1/4W	RV1006	1-223-269-11	RES, VAR, CARBON 10K/10K (AV531)			
R1014	1-249-431-11	CARBON	15K	5%	1/4W	< SWITCH >					
R1015	1-249-429-11	CARBON	10K	5%	1/4W	S102	1-554-303-21	SWITCH, TACTILE (PHONO)			
R1016	1-249-429-11	CARBON	10K	5%	1/4W	S103	1-554-303-21	SWITCH, TACTILE (TUNER)			
R1017	1-247-852-11	CARBON	7.5K	5%	1/4W	S104	1-554-303-21	SWITCH, TACTILE (CD)			
R1018	1-247-852-11	CARBON	7.5K	5%	1/4W	S105	1-554-303-21	SWITCH, TACTILE (TAPE)			
R1019	1-249-425-11	CARBON	4.7K	5%	1/4W F	S106	1-554-303-21	SWITCH, TACTILE (VIDEO)			
R1020	1-249-425-11	CARBON	4.7K	5%	1/4W F	S107	1-554-303-21	SWITCH, TACTILE (REAR LEVEL +)			
R1021	1-249-423-11	CARBON	3.3K	5%	1/4W F	S108	1-554-303-21	SWITCH, TACTILE (REAR LEVEL -)			
R1022	1-249-423-11	CARBON	3.3K	5%	1/4W F	S109	1-554-303-21	SWITCH, TACTILE (CENTER LEVEL +)			
R1023	1-247-887-00	CARBON	220K	5%	1/4W						(AV531)
R1024	1-249-417-11	CARBON	1K	5%	1/4W F	S110	1-554-303-21	SWITCH, TACTILE (CENTER LEVEL -)			
R1051	1-247-887-00	CARBON	220K	5%	1/4W						(AV531)
R1052	1-247-887-00	CARBON	220K	5%	1/4W	S111	1-554-303-21	SWITCH, TACTILE (SURROUND))			
R1053	1-249-429-11	CARBON	10K	5%	1/4W	S112	1-554-303-21	SWITCH, TACTILE (HALL)			
R1054	1-249-425-11	CARBON	4.7K	5%	1/4W F	S113	1-554-303-21	SWITCH, TACTILE (SIMULATED)			
R1055	1-249-441-11	CARBON	100K	5%	1/4W	S114	1-554-303-21	SWITCH, TACTILE (DELAY TIME)			
R1056	1-249-417-11	CARBON	1K	5%	1/4W F						(AV531)
R1057	1-249-413-11	CARBON	470	5%	1/4W F	S115	1-554-303-21	SWITCH, TACTILE (DBFB)			
R1058	1-249-434-11	CARBON	27K	5%	1/4W	S116	1-554-303-21	SWITCH, TACTILE (PHANTOM) (AV531)			
R1059	1-249-411-11	CARBON	330	5%	1/4W	S117	1-554-303-21	SWITCH, TACTILE (NORMAL) (AV531)			
R1060	1-249-426-11	CARBON	5.6K	5%	1/4W	S118	1-554-303-21	SWITCH, TACTILE (WIDE) (AV531)			

DISPLAY

FUSE

HP

MAIN

Ref.No.	Part No.	Description	Remark
S119	1-554-303-21	SWITCH, TACTILE (3 CH) (AV531)	
S120	1-554-303-21	SWITCH, TACTILE (DOLBY) (AV431)	
< VIBRATOR >			
X101	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)	

*	1-642-689-11	FUSE BOARD	

	1-533-217-31	HOLDER, FUSE	
< FUSE >			
△F951	1-576-109-11	FUSE 5A 125V	
△F952	1-576-109-11	FUSE 5A 125V	

*	1-646-472-11	HP BOARD	

< JACK >			
J701	1-569-113-11	JACK, LARGE TYPE	
< RESISTOR >			
R738	1-249-420-11	CARBON 1.8K 5% 1/4W F	
R739	1-249-420-11	CARBON 1.8K 5% 1/4W F	
R788	1-249-420-11	CARBON 1.8K 5% 1/4W F	
R789	1-249-420-11	CARBON 1.8K 5% 1/4W F	

*	A-4360-347-A	MAIN BOARD, COMPLETE (AV431)	

*	A-4360-464-A	MAIN BOARD, COMPLETE (AV531)	

*	4-942-204-01	PLATE, GROUND	
	7-682-548-04	SCREW +BYTT 3X8 (S)	
< CAPACITOR >			
C301	1-124-907-11	ELECT 10uF 20% 50V	
C302	1-162-215-31	CERAMIC 47PF 5% 50V	
C303	1-124-907-11	ELECT 10uF 20% 50V	
C311	1-124-907-11	ELECT 10uF 20% 50V	
C312	1-162-215-31	CERAMIC 47PF 5% 50V	
C313	1-124-907-11	ELECT 10uF 20% 50V	
C321	1-126-925-11	ELECT 470uF 20% 10V	
C322	1-124-927-11	ELECT 4.7uF 20% 100V	
C323	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C324	1-130-487-00	MYLAR 0.022uF 5% 50V	

Ref.No.	Part No.	Description	Remark
C325	1-162-284-31	CERAMIC 150PF 10% 50V	
C326	1-126-923-11	ELECT 220uF 20% 10V	
C327	1-126-923-11	ELECT 220uF 20% 10V	
C328	1-164-159-11	CERAMIC 0.1uF 50V	
C329	1-126-933-11	ELECT 100uF 20% 16V	
C332	1-136-169-00	FILM 0.22uF 5% 50V	
C333	1-130-493-00	MYLAR 0.068uF 5% 50V	
C334	1-102-124-00	CERAMIC 0.0039uF 10% 50V	
C335	1-102-125-00	CERAMIC 4700PF 10% 50V	
C336	1-130-489-00	MYLAR 0.033uF 5% 50V	
C337	1-124-927-11	ELECT 4.7uF 20% 100V	
C338	1-124-903-11	ELECT 1uF 20% 50V	
C339	1-124-903-11	ELECT 1uF 20% 50V	
C340	1-130-489-00	MYLAR 0.033uF 5% 50V	
C341	1-102-126-00	CERAMIC 0.0056uF 10% 50V	
C342	1-102-127-00	CERAMIC 6800PF 10% 50V	
C343	1-162-291-31	CERAMIC 560PF 10% 50V	
C344	1-124-907-11	ELECT 10uF 20% 50V	
C345	1-124-907-11	ELECT 10uF 20% 50V	
C346	1-124-907-11	ELECT 10uF 20% 50V	
C347	1-124-907-11	ELECT 10uF 20% 50V	(AV531)
C348	1-162-292-31	CERAMIC 680PF 10% 50V	
C349	1-136-167-00	FILM 0.15uF 5% 50V	
C350	1-162-284-31	CERAMIC 150PF 10% 50V	
C351	1-130-487-00	MYLAR 0.022uF 5% 50V	
C352	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C353	1-124-927-11	ELECT 4.7uF 20% 100V	
C354	1-136-169-00	FILM 0.22uF 5% 50V	
C355	1-124-477-11	ELECT 47uF 20% 25V	
C356	1-124-907-11	ELECT 10uF 20% 50V	(AV531)
C357	1-124-907-11	ELECT 10uF 20% 50V	(AV531)
C358	1-124-907-11	ELECT 10uF 20% 50V	
C361	1-126-923-11	ELECT 220uF 20% 10V	(AV531)
C362	1-124-477-11	ELECT 47uF 20% 25V	(AV531)
C363	1-124-252-00	ELECT 0.33uF 20% 50V	(AV531)
C364	1-162-292-31	CERAMIC 680PF 10% 50V	(AV531)
C365	1-136-165-00	FILM 0.1uF 5% 50V	(AV531)
C366	1-136-165-00	FILM 0.1uF 5% 50V	(AV531)
C367	1-124-927-11	ELECT 4.7uF 20% 100V	(AV531)
C368	1-124-927-11	ELECT 4.7uF 20% 100V	(AV531)

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C369	1-136-167-00	FILM	0.15uF	5%	50V (AV531)	C412	1-124-927-11	ELECT	4.7uF	20%	100V (AV531)
C370	1-123-382-00	ELECT	3.3uF	20%	100V (AV531)	C413	1-124-927-11	ELECT	4.7uF	20%	100V (AV531)
C371	1-136-167-00	FILM	0.15uF	5%	50V (AV531)	C414	1-124-927-11	ELECT	4.7uF	20%	100V (AV531)
C372	1-136-167-00	FILM	0.15uF	5%	50V (AV531)	C415	1-136-167-00	FILM	0.15uF	5%	50V (AV531)
C373	1-123-382-00	ELECT	3.3uF	20%	100V (AV531)	C508	1-162-282-31	CERAMIC	100PF	10%	50V
C374	1-136-167-00	FILM	0.15uF	5%	50V (AV531)	C509	1-124-927-11	ELECT	4.7uF	20%	100V
C375	1-124-927-11	ELECT	4.7uF	20%	100V (AV531)	C510	1-162-282-31	CERAMIC	100PF	10%	50V
C376	1-124-927-11	ELECT	4.7uF	20%	100V (AV531)	C511	1-124-477-11	ELECT	47uF	20%	25V
C378	1-162-292-31	CERAMIC	680PF	10%	50V (AV531)	C512	1-102-126-00	CERAMIC	0.0056uF	10%	50V
C379	1-124-252-00	ELECT	0.33uF	20%	50V (AV531)	C513	1-102-119-00	CERAMIC	1500PF	10%	50V
C380	1-136-165-00	FILM	0.1uF	5%	50V (AV531)	C515	1-124-903-11	ELECT	1uF	20%	50V
C381	1-136-165-00	FILM	0.1uF	5%	50V (AV531)	C516	1-124-477-11	ELECT	47uF	20%	25V
C382	1-124-902-00	ELECT	0.47uF	20%	50V (AV531)	C517	1-124-907-11	ELECT	10uF	20%	50V
C383	1-124-907-11	ELECT	10uF	20%	50V (AV531)	C518	1-162-294-31	CERAMIC	0.001uF	10%	50V
C384	1-124-907-11	ELECT	10uF	20%	50V	C558	1-162-282-31	CERAMIC	100PF	10%	50V
C385	1-124-907-11	ELECT	10uF	20%	50V (AV531)	C559	1-124-927-11	ELECT	4.7uF	20%	100V
C386	1-124-907-11	ELECT	10uF	20%	50V	C560	1-162-282-31	CERAMIC	100PF	10%	50V
C387	1-130-485-00	MYLAR	0.015uF	5%	50V (AV531)	C561	1-124-477-11	ELECT	47uF	20%	25V
C388	1-130-483-00	MYLAR	0.01uF	5%	50V (AV531)	C562	1-102-126-00	CERAMIC	0.0056uF	10%	50V
C389	1-162-292-31	CERAMIC	680PF	10%	50V (AV531)	C563	1-102-119-00	CERAMIC	1500PF	10%	50V
C390	1-136-165-00	FILM	0.1uF	5%	50V (AV531)	C565	1-124-903-11	ELECT	1uF	20%	50V
C391	1-162-215-31	CERAMIC	47PF	5%	50V	C566	1-124-477-11	ELECT	47uF	20%	25V
C392	1-162-215-31	CERAMIC	47PF	5%	50V	C701	1-124-927-11	ELECT	4.7uF	20%	100V
C393	1-124-907-11	ELECT	10uF	20%	50V	C702	1-162-286-31	CERAMIC	220PF	10%	50V
C396	1-162-215-31	CERAMIC	47PF	5%	50V	C703	1-124-477-11	ELECT	47uF	20%	25V
C397	1-162-215-31	CERAMIC	47PF	5%	50V	C704	1-124-477-11	ELECT	47uF	20%	25V
C398	1-124-907-11	ELECT	10uF	20%	50V	C705	1-162-292-31	CERAMIC	680PF	10%	50V
C401	1-124-927-11	ELECT	4.7uF	20%	100V	C706	1-162-205-31	CERAMIC	18PF	5%	50V
C402	1-124-927-11	ELECT	4.7uF	20%	100V	C707	1-161-959-00	CERAMIC	22PF	10%	500V
C403	1-124-927-11	ELECT	4.7uF	20%	100V	C708	1-124-477-11	ELECT	47uF	20%	25V
C404	1-124-927-11	ELECT	4.7uF	20%	100V	C709	1-161-959-00	CERAMIC	22PF	10%	500V
C405	1-124-903-11	ELECT	1uF	20%	50V	C710	1-136-165-00	FILM	0.1uF	5%	50V
C411	1-124-927-11	ELECT	4.7uF	20%	100V (AV531)	C711	1-130-487-00	MYLAR	0.022uF	5%	50V
						C713	1-164-097-11	CERAMIC	0.022uF		50V
						C714	1-124-477-11	ELECT	47uF	20%	25V
						C715	1-126-933-11	ELECT	100uF	20%	16V
						C716	1-124-907-11	ELECT	10uF	20%	50V
						C717	1-124-477-11	ELECT	47uF	20%	25V
						C721	1-102-125-00	CERAMIC	4700PF	10%	50V
						C722	1-164-097-11	CERAMIC	0.022uF		50V
						C751	1-124-927-11	ELECT	4.7uF	20%	100V
						C752	1-162-286-31	CERAMIC	220PF	10%	50V
						C753	1-124-477-11	ELECT	47uF	20%	25V
						C754	1-124-477-11	ELECT	47uF	20%	25V
						C755	1-162-292-31	CERAMIC	680PF	10%	50V
						C756	1-162-205-31	CERAMIC	18PF	5%	50V
						C757	1-161-959-00	CERAMIC	22PF	10%	500V

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C758	1-124-477-11	ELECT	47uF 20% 25V			< PIN, CONNECTOR >	
C759	1-161-959-00	CERAMIC	22PF 10% 500V				
C760	1-136-165-00	FILM	0.1uF 5% 50V	CP502	1-691-637-11	PIN, CONNECTOR 9P (AV431)	
C761	1-130-487-00	MYLAR	0.022uF 5% 50V			< DIODE >	
C951	1-106-367-00	MYLAR	0.01uF 5% 200V				
C952	1-106-367-00	MYLAR	0.01uF 5% 200V	D701	8-719-933-41	DIODE HZS6C3L	
C953	1-125-729-31	ELECT	10000uF 20% 63V (AV431)	D702	8-719-815-85	DIODE 1S1585	
C953	1-125-730-11	ELECT	10000uF 20% 71V (AV531)	D703	8-719-815-85	DIODE 1S1585	
C954	1-125-729-31	ELECT	10000uF 20% 63V (AV431)	D704	8-719-815-85	DIODE 1S1585	
C954	1-125-730-11	ELECT	10000uF 20% 71V (AV531)	D706	8-719-987-63	DIODE 1N4148M	
C955	1-124-563-11	ELECT	2200uF 20% 25V (AV431)	D707	8-719-987-63	DIODE 1N4148M	
C955	1-124-636-00	ELECT	3300uF 20% 25V (AV531)	D751	8-719-933-41	DIODE HZS6C3L	
C956	1-124-563-11	ELECT	2200uF 20% 25V (AV431)	D752	8-719-815-85	DIODE 1S1585	
C956	1-124-636-00	ELECT	3300uF 20% 25V (AV531)	D753	8-719-815-85	DIODE 1S1585	
C957	1-164-097-11	CERAMIC	0.022uF 50V	D754	8-719-815-85	DIODE 1S1585	
C958	1-164-097-11	CERAMIC	0.022uF 50V				
C959	1-124-563-11	ELECT	2200uF 20% 25V	D951	8-719-302-38	DIODE RBV-602-01	
C960	1-124-480-11	ELECT	470uF 20% 25V	D952	8-719-312-09	DIODE RBA-402	
C963	1-124-907-11	ELECT	10uF 20% 50V	D953	8-719-200-82	DIODE 11ES2	
C964	1-124-907-11	ELECT	10uF 20% 50V	D954	8-719-200-82	DIODE 11ES2	
C965	1-124-477-11	ELECT	47uF 20% 25V	D955	8-719-200-82	DIODE 11ES2	
C966	1-126-925-11	ELECT	470uF 20% 10V				
C967	1-124-477-11	ELECT	47uF 20% 25V (AV431)	D956	8-719-200-82	DIODE 11ES2	
C968	1-124-477-11	ELECT	47uF 20% 25V	D957	8-719-002-48	DIODE UZL-27H	
C969	1-124-477-11	ELECT	47uF 20% 25V (AV431)	D959	8-719-987-63	DIODE 1N4148M	
C972	1-124-477-11	ELECT	47uF 20% 25V (AV431)			< IC >	
C973	1-124-903-11	ELECT	1uF 20% 50V	IC301	8-759-634-50	IC M5218AL	
C974	1-124-903-11	ELECT	1uF 20% 50V	IC302	8-759-801-01	IC LC4966	
		< SOCKET >		IC303	8-759-801-01	IC LC4966 (AV531)	
* CJ401	1-568-826-11	SOCKET, CONNECTOR 7P (AV431)		IC304	8-759-823-63	IC LV1001M	
* CJ401	1-568-828-11	SOCKET, CONNECTOR 9P (AV531)		IC305	8-759-821-13	IC LM3364K-15	
* CJ402	1-568-836-11	SOCKET, CONNECTOR 17P					
* CJ403	1-568-824-11	SOCKET, CONNECTOR 5P		IC306	8-759-634-50	IC M5218AL	
* CJ404	1-568-826-11	SOCKET, CONNECTOR 7P (AV531)		IC307	8-759-634-50	IC M5218AL	
				IC308	8-759-098-54	IC LA2780N (AV531)	
CJ501	1-691-887-11	JACK, PIN 6P		IC401	8-759-820-11	IC LC7535	
CJ502	1-573-028-21	JACK, PIN 4P (AV531)		IC402	8-759-634-51	IC M5218AP	
CJ503	1-565-949-11	SOCKET, CONNECTOR 9P (AV431)					
CJ504	1-565-949-11	SOCKET, CONNECTOR 9P		IC501	8-759-634-51	IC M5218AP	
* CJ701	1-568-826-11	SOCKET, CONNECTOR 7P		IC502	8-759-805-14	IC LC7822	
				IC701	8-759-111-68	IC uPC1237HA	
				IC951	8-759-604-39	IC M5F79M12L	
				IC952	8-759-604-35	IC M5F78M05L	
				IC954	8-759-604-45	IC M5F79M12L	
				IC955	8-759-604-44	IC M5F79M10L (AV431)	
						< COIL >	
				L301	1-410-521-11	INDUCTOR 100uH	
				L701	1-420-872-00	COIL, AIR CORE	
				L751	1-420-872-00	COIL, AIR CORE	
						< TRANSISTOR >	
				Q301	8-729-141-30	TRANSISTOR 2SC3623A-LK	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q302	8-729-900-36	TRANSISTOR	DTC124ES	R309	1-249-417-11	CARBON	1K 5% 1/4W F
Q303	8-729-900-36	TRANSISTOR	DTC124ES	R310	1-249-417-11	CARBON	1K 5% 1/4W F
Q304	8-729-900-63	TRANSISTOR	DTA124ES				(AV431)
Q305	8-729-140-98	TRANSISTOR	2SD773-34	R311	1-247-887-00	CARBON	220K 5% 1/4W
Q401	8-729-141-30	TRANSISTOR	2SC3623A-LK	R312	1-247-887-00	CARBON	220K 5% 1/4W
Q411	8-729-141-30	TRANSISTOR	2SC3623A-LK (AV531)	R313	1-247-887-00	CARBON	220K 5% 1/4W
Q701	8-729-620-18	TRANSISTOR	2SA979-FG	R314	1-247-887-00	CARBON	220K 5% 1/4W
Q702	8-729-140-82	TRANSISTOR	2SA988-PAFAEA	R319	1-249-417-11	CARBON	1K 5% 1/4W F
Q703	8-729-119-78	TRANSISTOR	2SC2785-HFE	R320	1-249-417-11	CARBON	1K 5% 1/4W F
							(AV431)
Q704	8-729-119-78	TRANSISTOR	2SC2785-HFE	R321	1-249-425-11	CARBON	4.7K 5% 1/4W F
Q705	8-729-141-06	TRANSISTOR	2SA1142-QPE	R322	1-249-430-11	CARBON	12K 5% 1/4W
Q706	8-729-209-15	TRANSISTOR	2SD2012	R323	1-247-903-00	CARBON	1M 5% 1/4W
Q708	8-729-119-78	TRANSISTOR	2SC2785-HFE	R324	1-249-437-11	CARBON	47K 5% 1/4W
Q709	8-729-119-76	TRANSISTOR	2SA1175-HFE	R325	1-249-423-11	CARBON	3.3K 5% 1/4W F
Q710	8-729-141-46	TRANSISTOR	2SC4431-LK	R326	1-249-429-11	CARBON	10K 5% 1/4W
Q711	8-729-141-37	TRANSISTOR	2SA1684-LK	R327	1-249-413-11	CARBON	470 5% 1/4W F
Q712	8-729-320-83	TRANSISTOR	2SC3855-OY	R328	1-249-428-11	CARBON	8.2K 5% 1/4W F
Q713	8-729-320-86	TRANSISTOR	2SA1491-OY	R329	1-249-428-11	CARBON	8.2K 5% 1/4W F
Q714	8-729-178-42	TRANSISTOR	2SC2784-F	R330	1-249-431-11	CARBON	15K 5% 1/4W
Q716	8-729-119-78	TRANSISTOR	2SC2785-HFE	R331	1-249-428-11	CARBON	8.2K 5% 1/4W F
Q717	8-729-119-78	TRANSISTOR	2SC2785-HFE (AV531)	R332	1-249-436-11	CARBON	39K 5% 1/4W
Q718	8-729-178-42	TRANSISTOR	2SC2784-F	R333	1-249-429-11	CARBON	10K 5% 1/4W
Q719	8-729-900-63	TRANSISTOR	DTA124ES				(AV531)
Q720	8-729-900-36	TRANSISTOR	DTC124ES	R334	1-247-887-00	CARBON	220K 5% 1/4W
Q721	8-729-900-63	TRANSISTOR	DTA124ES	R335	1-247-887-00	CARBON	220K 5% 1/4W
Q751	8-729-620-18	TRANSISTOR	2SA979-FG	R351	1-249-427-11	CARBON	6.8K 5% 1/4W F
Q752	8-729-140-82	TRANSISTOR	2SA988-PAFAEA	R352	1-249-427-11	CARBON	6.8K 5% 1/4W F
Q753	8-729-119-78	TRANSISTOR	2SC2785-HFE	R353	1-247-887-00	CARBON	220K 5% 1/4W
Q754	8-729-119-78	TRANSISTOR	2SC2785-HFE	R354	1-249-429-11	CARBON	10K 5% 1/4W
							(AV531)
Q755	8-729-141-06	TRANSISTOR	2SA1142-QPE	R355	1-249-429-11	CARBON	10K 5% 1/4W
Q756	8-729-209-15	TRANSISTOR	2SD2012	R356	1-249-429-11	CARBON	10K 5% 1/4W
Q757	8-729-141-05	TRANSISTOR	2SC2682-QPE	R357	1-249-429-11	CARBON	10K 5% 1/4W
Q758	8-729-119-78	TRANSISTOR	2SC2785-HFE	R358	1-249-429-11	CARBON	10K 5% 1/4W
Q759	8-729-119-76	TRANSISTOR	2SA1175-HFE	R361	1-249-429-11	CARBON	10K 5% 1/4W
							(AV531)
Q760	8-729-141-46	TRANSISTOR	2SC4431-LK	R362	1-249-422-11	CARBON	2.7K 5% 1/4W F
Q761	8-729-141-37	TRANSISTOR	2SA1684-LK				(AV531)
Q762	8-729-320-83	TRANSISTOR	2SC3855-OY	R363	1-249-431-11	CARBON	15K 5% 1/4W
Q763	8-729-320-86	TRANSISTOR	2SA1491-OY				(AV531)
Q764	8-729-178-42	TRANSISTOR	2SC2784-F	R364	1-249-421-11	CARBON	2.2K 5% 1/4W F
							(AV531)
Q951	8-729-141-83	TRANSISTOR	2SB1094-LK	R365	1-249-437-11	CARBON	47K 5% 1/4W
Q953	8-729-119-78	TRANSISTOR	2SC2785-HFE				(AV531)
				R366	1-247-852-11	CARBON	7.5K 5% 1/4W
							(AV531)
				R367	1-247-852-11	CARBON	7.5K 5% 1/4W
							(AV531)
				R368	1-249-437-11	CARBON	47K 5% 1/4W
							(AV531)
< RESISTOR >							
R301	1-247-887-00	CARBON	220K 5% 1/4W				
R302	1-247-887-00	CARBON	220K 5% 1/4W				
R303	1-247-887-00	CARBON	220K 5% 1/4W				
R304	1-247-887-00	CARBON	220K 5% 1/4W				
R305	1-249-423-11	CARBON	3.3K 5% 1/4W F				
R306	1-249-433-11	CARBON	22K 5% 1/4W				
R308	1-249-441-11	CARBON	100K 5% 1/4W				

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R369	1-249-421-11	CARBON 2. 2K 5% 1/4W F (AV531)		R552	1-249-427-11	CARBON 6. 8K 5% 1/4W F	
R370	1-249-431-11	CARBON 15K 5% 1/4W (AV531)		R553	1-249-433-11	CARBON 22K 5% 1/4W (AV531)	
R371	1-249-433-11	CARBON 22K 5% 1/4W (AV531)		R554	1-249-417-11	CARBON 1K 5% 1/4W F	
R372	1-249-433-11	CARBON 22K 5% 1/4W (AV531)		R555	1-249-417-11	CARBON 1K 5% 1/4W F	
R373	1-249-429-11	CARBON 10K 5% 1/4W (AV531)		R556	1-249-417-11	CARBON 1K 5% 1/4W F	
R381	1-249-429-11	CARBON 10K 5% 1/4W		R557	1-249-417-11	CARBON 1K 5% 1/4W F	
R382	1-249-429-11	CARBON 10K 5% 1/4W		R559	1-249-441-11	CARBON 100K 5% 1/4W	
R391	1-247-895-00	CARBON 470K 5% 1/4W		R560	1-249-441-11	CARBON 100K 5% 1/4W	
R392	1-249-429-11	CARBON 10K 5% 1/4W		R561	1-249-417-11	CARBON 1K 5% 1/4W F	
R393	1-249-429-11	CARBON 10K 5% 1/4W		R562	1-247-897-11	CARBON 560K 5% 1/4W	
R396	1-247-895-00	CARBON 470K 5% 1/4W		R563	1-249-437-11	CARBON 47K 5% 1/4W	
R397	1-249-429-11	CARBON 10K 5% 1/4W		R564	1-249-441-11	CARBON 100K 5% 1/4W	
R398	1-249-429-11	CARBON 10K 5% 1/4W		R565	1-249-409-11	CARBON 220 5% 1/4W F	
R401	1-247-887-00	CARBON 220K 5% 1/4W		R701	1-249-417-11	CARBON 1K 5% 1/4W F	
R402	1-249-429-11	CARBON 10K 5% 1/4W		R702	1-249-435-11	CARBON 33K 5% 1/4W	
R403	1-249-440-11	CARBON 82K 5% 1/4W		R703	1-249-409-11	CARBON 220 5% 1/4W F	
R404	1-247-887-00	CARBON 220K 5% 1/4W		R704	1-249-421-11	CARBON 2. 2K 5% 1/4W F	
R405	1-249-425-11	CARBON 4. 7K 5% 1/4W F		R705	1-249-434-11	CARBON 27K 5% 1/4W	
R411	1-247-887-00	CARBON 220K 5% 1/4W (AV531)		R706	1-249-426-11	CARBON 5. 6K 5% 1/4W	
R412	1-249-429-11	CARBON 10K 5% 1/4W (AV531)		R707	1-249-425-11	CARBON 4. 7K 5% 1/4W F	
R413	1-249-440-11	CARBON 82K 5% 1/4W (AV531)		R708	1-249-435-11	CARBON 33K 5% 1/4W	
R414	1-247-887-00	CARBON 220K 5% 1/4W (AV531)		R709	1-249-411-11	CARBON 330 5% 1/4W	
R415	1-249-417-11	CARBON 1K 5% 1/4W F (AV531)		△R710	1-249-409-11	CARBON 220 5% 1/4W F	
R416	1-249-417-11	CARBON 1K 5% 1/4W F (AV431)		△R711	1-249-409-11	CARBON 220 5% 1/4W F	
R501	1-249-411-11	CARBON 330 5% 1/4W		R712	1-249-435-11	CARBON 33K 5% 1/4W	
R502	1-249-427-11	CARBON 6. 8K 5% 1/4W F		△R713	1-249-397-11	CARBON 22 5% 1/4W F	
R503	1-249-433-11	CARBON 22K 5% 1/4W (AV531)		R714	1-247-830-11	CARBON 910 5% 1/4W	
R504	1-249-417-11	CARBON 1K 5% 1/4W F		R715	1-249-412-11	CARBON 390 5% 1/4W F	
R505	1-249-417-11	CARBON 1K 5% 1/4W F		△R716	1-249-397-11	CARBON 22 5% 1/4W F	
R506	1-249-417-11	CARBON 1K 5% 1/4W F		△R717	1-249-393-11	CARBON 10 5% 1/4W F	
R507	1-249-417-11	CARBON 1K 5% 1/4W F		△R718	1-249-393-11	CARBON 10 5% 1/4W F	
R509	1-249-441-11	CARBON 100K 5% 1/4W		△R719	1-249-423-11	CARBON 3. 3K 5% 1/4W F	
R510	1-249-441-11	CARBON 100K 5% 1/4W		△R720	1-249-417-11	CARBON 1K 5% 1/4W F	
R511	1-249-417-11	CARBON 1K 5% 1/4W F		△R721	1-249-417-11	CARBON 1K 5% 1/4W F	
R512	1-247-897-11	CARBON 560K 5% 1/4W		△R722	1-249-421-11	CARBON 2. 2K 5% 1/4W F	
R513	1-249-437-11	CARBON 47K 5% 1/4W		△R723	1-247-706-11	CARBON 330 5% 1/4W F	
R514	1-249-441-11	CARBON 100K 5% 1/4W		△R724	1-247-688-11	CARBON 10 5% 1/4W	
R515	1-249-409-11	CARBON 220 5% 1/4W F		△R725	1-247-688-11	CARBON 10 5% 1/4W	
R516	1-249-425-11	CARBON 4. 7K 5% 1/4W F		△R726	1-214-789-00	RES, METAL PLATE 0. 1	
R551	1-249-411-11	CARBON 330 5% 1/4W		△R727	1-214-789-00	RES, METAL PLATE 0. 1	
				R728	1-260-072-11	CARBON 4. 7 5% 1/2W	
				R729	1-260-076-11	CARBON 10 5% 1/2W	
				R730	1-249-407-11	CARBON 150 5% 1/4W F	
				R731	1-249-431-11	CARBON 15K 5% 1/4W	
				R732	1-249-437-11	CARBON 47K 5% 1/4W	
				R734	1-249-425-11	CARBON 4. 7K 5% 1/4W F	
				R735	1-249-425-11	CARBON 4. 7K 5% 1/4W F (AV531)	
				R736	1-249-438-11	CARBON 56K 5% 1/4W	
				R737	1-249-428-11	CARBON 8. 2K 5% 1/4W F	

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Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R739	1-249-429-11	CARBON	10K 5% 1/4W			(AV431)	
R740	1-249-427-11	CARBON	6.8K 5% 1/4W F	R961	1-249-385-11	CARBON 2.2 5% 1/6W F	
R741	1-249-441-11	CARBON	100K 5% 1/4W	R962	1-249-385-11	CARBON 2.2 5% 1/6W F	
R742	1-249-425-11	CARBON	4.7K 5% 1/4W F			(AV431)	
R743	1-249-437-11	CARBON	47K 5% 1/4W	R963	1-249-385-11	CARBON 2.2 5% 1/6W F	(AV431)
R744	1-249-423-11	CARBON	3.3K 5% 1/4W F	R964	1-249-385-11	CARBON 2.2 5% 1/6W F	(AV431)
R751	1-249-417-11	CARBON	1K 5% 1/4W F	R965	1-249-385-11	CARBON 2.2 5% 1/6W F	(AV431)
R752	1-249-435-11	CARBON	33K 5% 1/4W	R966	1-249-385-11	CARBON 2.2 5% 1/6W F	(AV431)
R753	1-249-409-11	CARBON	220 5% 1/4W F	R968	1-249-417-11	CARBON 1K 5% 1/4W F	
R754	1-249-421-11	CARBON	2.2K 5% 1/4W F	R969	1-249-393-11	CARBON 10 5% 1/4W F	
R755	1-249-434-11	CARBON	27K 5% 1/4W			< RELAY >	
R756	1-249-426-11	CARBON	5.6K 5% 1/4W	RY701	1-515-356-00	RELAY	
R757	1-249-425-11	CARBON	4.7K 5% 1/4W F			< VIBRATOR >	
R758	1-249-435-11	CARBON	33K 5% 1/4W	X301	1-579-125-11	VIBRATOR, CERAMIC (8MHz)	
R759	1-249-411-11	CARBON	330 5% 1/4W			*****	
△R760	1-249-409-11	CARBON	220 5% 1/4W F			* A-4360-013-A POWER BOARD, COMPLETE (AV431)	
△R761	1-249-409-11	CARBON	220 5% 1/4W F			*****	
R762	1-249-435-11	CARBON	33K 5% 1/4W			* A-4360-465-A POWER BOARD, COMPLETE (AV531)	
△R763	1-249-397-11	CARBON	22 5% 1/4W F			*****	
R764	1-247-830-11	CARBON	910 5% 1/4W			1-533-217-31 HOLDER, FUSE	
R765	1-249-412-11	CARBON	390 5% 1/4W F			< BASE POST >	
△R766	1-249-397-11	CARBON	22 5% 1/4W F	BP902	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P	
△R767	1-249-393-11	CARBON	10 5% 1/4W F	BP904	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P	
△R768	1-249-393-11	CARBON	10 5% 1/4W F			< CAPACITOR >	
△R769	1-249-423-11	CARBON	3.3K 5% 1/4W F	C901	1-161-744-00	CERAMIC 0.01uF 400V	
△R770	1-249-417-11	CARBON	1K 5% 1/4W F	C911	1-124-480-11	ELECT 470uF 20% 25V	
△R771	1-249-417-11	CARBON	1K 5% 1/4W F	C913	1-124-477-11	ELECT 47uF 20% 25V	
△R772	1-249-421-11	CARBON	2.2K 5% 1/4W F	C914	1-124-477-11	ELECT 47uF 20% 25V	
△R773	1-247-706-11	CARBON	330 5% 1/4W F	C916	1-164-097-11	CERAMIC 0.022uF 50V	
△R774	1-247-688-11	CARBON	10 5% 1/4W	C917	1-164-097-11	CERAMIC 0.022uF 50V	
△R775	1-247-688-11	CARBON	10 5% 1/4W	C918	1-124-903-11	ELECT 1uF 20% 50V	
△R776	1-214-789-00	RES, METAL PLATE 0.1		C919	1-164-097-11	CERAMIC 0.022uF 50V	
△R777	1-214-789-00	RES, METAL PLATE 0.1		C920	1-124-464-11	ELECT 0.22uF 20% 50V	
R778	1-260-072-11	CARBON	4.7 5% 1/2W	C921	1-164-097-11	CERAMIC 0.022uF 50V	
R779	1-260-076-11	CARBON	10 5% 1/2W	C922	1-162-282-31	CERAMIC 100PF 10% 50V	
R780	1-249-407-11	CARBON	150 5% 1/4W F			< CONNECTOR >	
R781	1-249-431-11	CARBON	15K 5% 1/4W	△CNJ901	1-540-060-11	OUTLET, AC (POLAR) (AV531)	
R783	1-249-438-11	CARBON	56K 5% 1/4W				
R954	1-215-917-11	METAL OXIDE	1K 5% 3W F (AV431)				
△R954	1-216-481-11	METAL OXIDE	1.2K 5% 3W F (AV531)				
△R955	1-215-890-11	METAL OXIDE	470 5% 2W F (AV431)				
△	1-247-749-11	CARBON	560 5% 1/2W (AV531)				
R956	1-249-426-11	CARBON	5.6K 5% 1/4W				
R957	1-249-385-11	CARBON	2.2 5% 1/6W F				
R958	1-249-385-11	CARBON	2.2 5% 1/6W F				
R959	1-249-385-11	CARBON	2.2 5% 1/6W F				
R960	1-249-385-11	CARBON	2.2 5% 1/6W F				

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Replace only with part number specified.

POWER

REAR

Ref.No.	Part No.	Description	Remark
< SOCKET >			
* CP901	1-568-826-11	SOCKET, CONNECTOR 7P (AV531)	
CP902	1-564-777-11	PLUG, CONNECTOR (2.5MM) 2P	
< DIODE >			
D911	8-719-200-82	DIODE 11ES2	
D912	8-719-200-82	DIODE 11ES2	
D913	8-719-200-82	DIODE 11ES2	
D914	8-719-200-82	DIODE 11ES2	
D915	8-719-987-63	DIODE 1N4148M	
D916	8-719-987-63	DIODE 1N4148M	
D917	8-719-933-41	DIODE HZS6C3L	
D918	8-719-933-41	DIODE HZS6C3L	
D919	8-719-985-53	DIODE HZS4ALL	
D920	8-719-987-63	DIODE 1N4148M	
< FUSE >			
△F901	1-532-749-11	FUSE, GLASS TUBE 8A	
< TRANSISTOR >			
Q911	8-729-209-15	TRANSISTOR 2SD2012	
Q922	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q923	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q924	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q925	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q926	8-729-119-78	TRANSISTOR 2SC2785-HFE	
< RESISTOR >			
R901	1-202-725-00	SOLID 3.3M 10% 1/2W	
R911	1-249-417-11	CARBON 1K 5% 1/4W F	
R912	1-249-437-11	CARBON 47K 5% 1/4W	
R913	1-249-433-11	CARBON 22K 5% 1/4W	
R914	1-249-429-11	CARBON 10K 5% 1/4W	
R915	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R916	1-249-429-11	CARBON 10K 5% 1/4W	
R917	1-249-417-11	CARBON 1K 5% 1/4W F	
R918	1-249-429-11	CARBON 10K 5% 1/4W	
R919	1-249-426-11	CARBON 5.6K 5% 1/4W	
R920	1-249-417-11	CARBON 1K 5% 1/4W F	
R921	1-249-426-11	CARBON 5.6K 5% 1/4W	
R922	1-249-396-11	CARBON 18 5% 1/6W F	
< RELAY >			
RY901	1-515-701-11	RELAY	
< TRASFORMER >			
T902	1-449-993-21	TRANSFORMER, POWER	

Ref.No.	Part No.	Description	Remark
*	A-4360-012-A	REAR BOARD, COMPLETE (AV431)	

(Including the CONNECT 2 BOARD)			
*	A-4360-017-A	REAR BOARD, COMPLETE (AV531)	

(Including the CONNECT 2 and CENTER BOARDS)			
< CAPACITOR >			
C801	1-124-927-11	ELECT 4.7uF 20% 100V	
C802	1-162-282-31	CERAMIC 100PF 10% 50V	
C803	1-162-282-31	CERAMIC 100PF 10% 50V	
C804	1-124-477-11	ELECT 47uF 20% 25V	
C805	1-162-191-31	CERAMIC 2.2PF 10% 50V	
C806	1-124-907-11	ELECT 10uF 20% 50V	
C807	1-124-907-11	ELECT 10uF 20% 50V	
C809	1-164-097-11	CERAMIC 0.022uF 50V	
C810	1-136-171-00	FILM 0.33uF 5% 50V	
C851	1-124-927-11	ELECT 4.7uF 20% 100V	(AV531)
C852	1-162-282-31	CERAMIC 100PF 10% 50V	(AV531)
C853	1-162-282-31	CERAMIC 100PF 10% 50V	(AV531)
C854	1-124-477-11	ELECT 47uF 20% 25V	(AV531)
C855	1-162-191-31	CERAMIC 2.2PF 10% 50V	(AV531)
C856	1-124-907-11	ELECT 10uF 20% 50V	(AV531)
C857	1-124-907-11	ELECT 10uF 20% 50V	(AV531)
C859	1-164-097-11	CERAMIC 0.022uF 50V	(AV531)
C860	1-136-171-00	FILM 0.33uF 5% 50V	(AV531)
< SOCKET >			
CJ801	1-562-087-00	SOCKET, CONNECTOR 4P	
* CJ803	1-568-826-11	SOCKET, CONNECTOR 7P	
< PLUG >			
CP802	1-691-765-11	PLUG (MICRO CONNECTOR) 3P	
< DIODE >			
D801	8-719-987-63	DIODE 1N4148M	
D802	8-719-987-63	DIODE 1N4148M	
D803	8-719-987-63	DIODE 1N4148M	
D851	8-719-987-63	DIODE 1N4148M (AV531)	
D852	8-719-987-63	DIODE 1N4148M (AV531)	
D853	8-719-987-63	DIODE 1N4148M (AV531)	

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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
		< IC >		*	1-646-470-11	REG BOARD (AV431)	
IC801	8-759-502-33	IC SI18752				*****	
IC851	8-759-502-33	IC SI18752 (AV531)				< PLUG >	
		< COIL >		*	CP951 1-506-779-11	PLUG, CONNECTOR (2.5MM) 4P	(AV431)
L801	1-420-872-00	COIL, AIR CORE				< IC >	
L851	1-420-872-00	COIL, AIR CORE (AV531)		IC953	8-759-604-32	IC M5F7810L (AV431)	
		< TRANSISTOR >		IC956	8-759-604-39	IC M5F78M12L (AV431)	
Q801	8-729-178-42	TRANSISTOR 2SC2784-F		*****			
Q851	8-729-178-42	TRANSISTOR 2SC2784-F (AV531)		*	1-646-471-11	SP BOARD	
		< RESISTOR >				*****	
R801	1-249-417-11	CARBON 1K 5% 1/4W F				< PLUG >	
R802	1-249-439-11	CARBON 68K 5% 1/4W		CP702	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
R803	1-249-419-11	CARBON 1.5K 5% 1/4W F				< TERMINAL >	
R804	1-249-439-11	CARBON 68K 5% 1/4W		*	TM701 1-537-265-11	TERMINAL BOARD	
R805	1-217-151-00	RES, METAL PLATE 0.22		*****			
R806	1-249-389-11	CARBON 4.7 5% 1/4W F		*	1-642-692-11	SURR. SP BOARD	
R807	1-249-409-11	CARBON 220 5% 1/4W F				*****	
R808	1-249-428-11	CARBON 8.2K 5% 1/4W F				< PIN, CONNECTOR >	
△R809	1-249-393-11	CARBON 10 5% 1/4W F		*	CP701 1-506-509-11	PIN, CONNECTOR 4P (AV431)	
R810	1-249-435-11	CARBON 33K 5% 1/4W		CP701	1-568-739-11	PIN, CONNECTOR 4P (AV531)	
R851	1-249-417-11	CARBON 1K 5% 1/4W F	(AV531)			< TERMINAL >	
R852	1-249-439-11	CARBON 68K 5% 1/4W	(AV531)	*	TM702 1-537-265-11	TERMINAL BOARD	
R853	1-249-419-11	CARBON 1.5K 5% 1/4W F	(AV531)	*	TM703 1-537-405-11	TERMINAL BOARD (2P.SP) (AV531)	
R854	1-249-439-11	CARBON 68K 5% 1/4W	(AV531)	*****			
R855	1-217-151-00	RES, METAL PLATE 0.22 (AV531)		*	1-646-470-11	SW BOARD	
R856	1-249-389-11	CARBON 4.7 5% 1/4W F	(AV531)			*****	
R857	1-249-409-11	CARBON 220 5% 1/4W F	(AV531)			< PLUG >	
R858	1-249-428-11	CARBON 8.2K 5% 1/4W F	(AV531)	* CP101	1-565-295-11	PLUG, CONNECTOR 4P	
△R859	1-249-393-11	CARBON 10 5% 1/4W F	(AV531)			< SWITCH >	
R860	1-249-433-11	CARBON 22K 5% 1/4W	(AV531)	S101	1-554-303-21	SWITCH, TACTILE (SYSTEM POWER)	
		< RELAY >		*****			
RY801	1-515-790-11	RELAY					
RY851	1-515-790-11	RELAY (AV531)					

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

VOL

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-642-693-11	VOL BOARD *****				***** HARDWARE LIST *****	
		< CAPACITOR >					
C421	1-164-097-11	CERAMIC 0.022uF	50V	#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
		< SOCKET >		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
* CJ421	1-568-826-11	SOCKET, CONNECTOR 7P (AV431)		#3	7-685-903-21	SCREW +PTPWH 3X8 (TYPE2)	
* CJ421	1-568-828-11	SOCKET, CONNECTOR 9P (AV531)		#4	7-682-561-04	SCREW +BVTT 4X8 (S)	
		< VARIABLE RESISTOR >		#5	7-682-950-01	SCREW +PSW 3X12	
RV405	1-241-816-11	RES, VAR, CARBON 100KX4		#6	7-685-647-71	SCREW +BVTP 3X10 TYPE2 IT-3	
*****				#7	7-621-849-00	SCREW, TAPPING	
		MISCELLANEOUS *****		#8	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S (AV531)	
8	1-690-588-31	WIRE, FLAT TYPE (9 CORE) (AV531)		#9	7-682-548-04	SCREW +BVTT 3X8 (S)	
8	1-696-413-11	WIRE (FLAT TYPE) (7 CORE) (AV431)					
11	1-575-666-11	WIRE, FLAT TYPE (5 CORE)					
14	1-590-241-11	WIRE, FLAT TYPE (7 CORE) (AV431)					
	1-690-114-11	WIRE, FLAT TYPE (7 CORE) (AV531)					
15	1-590-487-11	WIRE, FLAT TYPE (17 CORE)					
* 21	1-590-769-11	WIRE, FLAT TYPE (7 CORE)					
* 60	1-590-769-11	WIRE, FLAT TYPE (7 CORE)					
△CNP901	1-551-478-00	CORD, POWER					
FL101	1-590-663-11	INDICATOR TUBE, FLUORESCENT					
△T901	1-450-806-11	TRANSFORMER, POWER (AV431)					
△	1-450-808-11	TRANSFORMER, POWER (AV531)					

		ACCESSORIES & PACKING MATERIALS *****					
*	4-949-872-01	CUSHION (AV531)					
*	4-956-029-01	CUSHION (AV431)					

The components identified by mark
△ or dotted line with mark △ are
critical for safety.
Replace only with part number
specified.

TA-AV431/AV531

SONY[®] SERVICE MANUAL

US Model
Mexican Model
TA-AV431
US Model
TA-AV531

CORRECTION-1

Please Correct your service manual.

SECTION 5 ELECTRICAL PARTS LIST

 : Corrected Portion

Page. 35

Incorrect				Correct			
Ref.No.	Parts No.	Description	Remark	Ref.No.	Parts No.	Description	Remark
	*A-4360-013-A	POWER BOARD, COMPLETE (AV431) *****			*A-4360-014-A	POWER BOARD, COMPLETE (AV431) *****	

TA-AV431/AV531

SONY SERVICE MANUAL

US Model
Mexican Model
TA-AV431
US Model
TA-AV531

CORRECTION-2

Please correct your service manual.

 : indicates corrected portion.

SECTION 4 EXPLODED VIEWS

4-1. FRONT PANEL SECTION

Page. 25

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

INCORRECT				CORRECT			
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
* 12	4-921-941-11	CUSHION (FL)		* 12	4-921-941-01	CUSHION (FL)	
* 13	4-943-107-11	HOLDER (FL TUBE)		* 13	4-943-107-11	HOLDER (FL TUBE) (AV431)	
				* 13	4-949-779-11	HOLDER (FL TUBE) (AV531)	
FL101	1-590-663-11	INDICATOR TUBE, FLUORESCENT		FL101	1-519-663-12	INDICATOR TUBE, FLUORESCENT (AV431)	
				FL101	1-519-727-11	INDICATOR TUBE, FLUORESCENT (AV531)	

SECTION 5 ELECTRICAL PARTS LIST

MISCELLANEOUS

Page. 38

INCORRECT				CORRECT			
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
FL101	1-590-663-11	INDICATOR TUBE, FLUORESCENT		FL101	1-519-663-12	INDICATOR TUBE, FLUORESCENT (AV431)	
				FL101	1-519-727-11	INDICATOR TUBE, FLUORESCENT (AV531)	